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ABSTRACT

In February 1988 the Board of Education of the San Diego City Schools (California) adopted a core curriculum for all district schools. The implementation of this policy was studied in 1990 and 1992, and again in this followup study. Part I of this report provides an analysis of student enrollment and achievement data from 24 selected sites and followup data on a separate longitudinal analysis of the course enrollment and academic progress of a cohort of 6,700 students (enrolled in the regular mathematics or advanced mathematics courses in 1988-89) graduating in spring 1994. Part II provides an analysis of interview and survey data from 377 students, 2,402 parents, and 540 teachers. The longitudinal study data focusing on mathematics achievement show that, for most students, course enrollment at grade 7 is somewhat predictive of mathematics enrollment and achievement patterns throughout high school. More students enrolled in the regular math course dropped out, earned lower grades, or fell short of graduation requirements. Enrollment and achievement data suggest that the core curriculum policy has not eradicated academic stratification in that African American and Hispanic students continue to be over-represented in courses intended for earlier grade levels. Overall study data suggest that programming students into core courses that are appropriate to their levels of preparation, motivation, and achievement is difficult to implement. Nevertheless, implementation of the policy, by most accounts, has ensured access to a common core curriculum and eliminated a number of previously identified barriers to disadvantaged students. (Contains 32 tables, 41 figures, and 17 references.) (SLD)

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San Diego City Schools
PLANNING, ASSESSMENT, AND ACCOUNTABILITY DIVISION

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FOLLOWUP REPORT ON THE IMPLEMENTATION OF THE CORE CURRICULUM POLICY

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STANDARDS, ASSESSMENT, AND INTEGRATION SERVICES REPORT

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FOLLOW-UP REPORT ON THE IMPLEMENTATION OF THE CORE CURRICULUM POLICY

Prepared by

Susan Millett and Will Lindwall

January 9, 1996

San Diego City Schools
Planning, Assessment, and Accountability Division
Standards, Assessment, and Integration Services Unit

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The expertise shared by colleagues and community members
who serve on the Equity in Student Placement Practices Oversight Committee,
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SAN DIEGO CITY SCHOOLS
Planning, Assessment, and Accountability Division
Standards, Assessment, and Integration Services Unit

FOLLOW-UP REPORT ON THE IMPLEMENTATION OF THE CORE CURRICULUM POLICY

January 9, 1996

EXECUTIVE SUMMARY

ISSUE/CONCERN

In February 1988, the Board of Education adopted a core curriculum policy for all district schools. The implementation of the policy was reviewed by the Evaluation Department in 1990 and again by the Equity in Student Placement Practices Oversight Committee in 1992. The committee subsequently requested a follow-up evaluation to assess progress on the implementation of this policy.

PURPOSE OF THE STUDY

The Standards, Assessment, and Integration Services Unit has conducted a followup evaluation of the implementation of the core curriculum policy to examine (1) how sites define the core curriculum, (2) how sites promote enrollment and success in core courses, (3) the degree to which district students are participating in the core curriculum and programs which support it, and (4) the level of academic achievement of students enrolled in core courses. Part I provides an analysis of student enrollment and achievement data from 24 selected sites and follow-up data on a separate longitudinal analysis of the course enrollment and academic progress of a cohort of students graduating in Spring 1994. Part II provides an analysis of interview and survey data.

This formative study intends to assist the Board of Education and the Equity in Student Placement Practices Oversight Committee in assessing the degree to which the core curriculum policy has achieved its objectives to date and in identifying barriers which limit its potential for full and effective implementation.

BACKGROUND INFORMATION

In February 1988, the district Board of Education adopted a common core curriculum policy intended to "prepare students for a job market that is becoming more technical, scientific, and managerial;" "ensure a literate citizenry for the survival of our democracy;" and "provide students with more opportunities through a broad liberal arts education" ("Proposal to Implement Common Core Curriculum," 1988). The policy sought the identification of a logical sequence of courses leading to post secondary endeavors, the strengthening of course content rather than increasing graduation requirements, and the adoption of a more challenging, rigorous course of study for all students. Full implementation of the common core curriculum at all secondary schools, beginning at the ninth grade level, was then scheduled for the 1989-90 school year to ensure that the 1994 graduating class would reflect the newly identified graduation requirements.

Since adoption of the policy, progress on the implementation of a core curriculum was assessed by the Evaluation Unit in 1989-90 ("Common Core Curriculum Pilot: First Semester Progress Report," June 1989, and "Common Core Curriculum, 1989-90 Report of Implementation," September 1990), and by the Equity in Student Placement Practices Oversight Committee in 1992 ("Common Core Curriculum," May 1992). Drawing on the findings, the reports recommended that:

- sites carefully monitor student participation in motivational programs;
- sites document the academic achievement of students participating in support programs to assess program impact;
- sites identify and share successful student support programs to promote success in core courses;
- sites record staff participation in staff development programs related to the core curriculum policy;
- elementary sites ensure that students are provided a developmentally appropriate curriculum, implying individualized instruction in non-graded, multi-level classrooms;
- follow-up evaluation assess the views of students, staff, and parents with regard to the core curriculum policy, focusing on the policy's impact on class failure, dropout tendencies, career choices, and motivation levels; and
- follow-up evaluation extend the longitudinal study of the 1994 graduating class.

Based on these recommendations and additional concerns identified by the Equity in Student Placement Practices Oversight Committee, the Standards, Assessment, and Integration Services Unit has conducted a followup evaluation of the implementation of the core curriculum policy.

It is important to note that the evaluation study was requested and designed prior to the adoption of the district *Plan to Improve Student Achievement and Organizational Effectiveness (1993)* and its related design tasks and expectations. Therefore, while the study addresses many issues covered by the five design tasks and 16 expectations, the evaluation plan does not specifically reflect the design task format.

OVERALL SUMMARY

The results of a longitudinal cohort analysis of the enrollment and achievement patterns of the class of 1994 suggest that:

1. The percent of students who dropped out of school during the course of the study was highest among students in Group 1 (i.e., those who were enrolled as seventh graders in Math 7, the "regular" math sequence), male students, and Hispanics (15.8 percent), followed by White students (14.1 percent), African Americans (13.9 percent), and students in the "Other" ethnic category (11.1 percent).

2. The percent of students who were retained at grade level during the study was highest among students in Group 1, males, and Hispanic (11.3 percent) and African American (8.3 percent) students.

3. A decided majority of Group 1 students (97 percent) remained in the "regular" math sequence throughout their secondary-level course work. Less than half (45 percent) of Group 2 students (i.e., those who were enrolled as seventh graders in Advanced Math Junior High) remained in the "advanced" math sequence.

4. By grade 12, Hispanic students in both Group 1 and Group 2 were overrepresented among those still enrolled in math course work intended for earlier grade levels. African Americans in Group 1 were also overrepresented in these courses.

5. Average math course marks declined between grade 7 and grade 12, but to a greater degree within Group 1 than Group 2.

6. Because students in the White and "Other" ethnic categories had higher overall marks at grade 7 but experienced a greater decline by grade 12, the gap between the average course marks of these students and the average marks of African American and Hispanic students became smaller.

7. Students who began in the "advanced" math sequence (Group 2) earned course marks in grade 12 (first semester) that were roughly one-half grade higher, on average, than those earned by Group 1 students.

8. White students and students in the "Other" ethnicity category earned higher course marks in grade 12 (first semester), on average, than did their African American and Hispanic classmates.

9. Students in the "Other" ethnicity category, earned the highest overall citizenship grades at grade 12 (first semester), followed by White, Hispanic, and African American students.

10. Of the 2,334 cohort students whose grade 12 math course enrollment and grades were included in the analysis *(only roughly 35 percent of the original cohort of 6,700)*, 92.4 percent graduated at the conclusion of the 1993-94 school year; 89.4 percent of these graduates represent Group 1 students and 96.4 percent represent Group 2 students). When all "still active" students were included in the graduation data, regardless of whether or not they were enrolled in a math course during the 1993-94 school year, the data indicated that 91.5 percent of the cohort had graduated (88.1 percent of Group 1 students and 96 percent of Group 2 students).

11. Disproportionately represented among the 168 students who had not graduated because they had not completed requirements were Hispanic students and students in Group 1.

The analysis of core course enrollment and achievement data for students in grades 7, 9, and 11 during Semester 1, 1993-94, suggests that:

12. Almost all students were enrolled in courses identified as part of the core curriculum in each subject area; non-core course enrollment largely represented special language needs.

13. In general, African American and Hispanic students were overrepresented in courses intended for earlier grade levels. Asian American and White students were overrepresented in AP and other advanced course work, often joined by Filipino Americans and Indochinese Americans, depending on subject area.

14. In general, special education students, students identified as Chapter 1, and English Language Learners were overrepresented in less advanced course work. Students who were certified for gifted education were overrepresented in AP and other advanced course work.

15. Asian American students earned the highest average course marks in all four core course subjects and at all three grade levels. Depending on the subject area, African Americans, Hispanics, and students in the "Other" ethnic category earned the lowest average course marks, with the exception of grade 7 where students in the "Other" ethnic category earned slightly higher marks overall than did White students.

16. Females, on average, significantly outperformed their male classmates in all four core course subjects and at all three grade levels.

17. When compared with other students, special education and Chapter 1 students earned significantly lower course marks. The average marks of students with gifted certification were significantly higher than other students.

18. The highest percentage of students who *earned a "C" or above* in core curriculum areas was among those who were Asian American, certified for gifted education, not Chapter 1, female, not enrolled in special education, and English proficient.

19. The highest percentage of students who *failed* their core subject course was among those who were enrolled in special education, African American, Chapter 1, male, English Language Learners, not certified for gifted education, and in grade 9.

    Failure rates were particularly high (15 percent or more) for (a) *African American students* in math at grade 7; in math, science, and social studies at grade 9; and in math and science at grade 11; (b) *Hispanic students* in math at grade 7; in all core courses at grade 9; and in math and science at grade 11; (c) *Filipino American students* in science at grade 11; (d) *students in the "Other" ethnic category* in math, science, and social studies at grade 9; (e) *special education students* in math, science, and social studies at grade 7; in all core courses at grade 9; and in math, science, and social studies at grade 11; and (f) *Chapter 1 students* in math at grades 9 and 11; and *English Language Learners* in math at grades 9 and 11.

20. Students failed to earn a passing grade most frequently in mathematics; the failure rate was highest at grade 9 in all four core curriculum areas.

21. Male students were much more likely to fail a core curriculum course than were females, regardless of grade level, curriculum area, or ethnicity.

22. African American students were most likely to receive either a "Needs Improvement" or "Unsatisfactory" citizenship mark, independent of course subject, followed by Hispanics, students in the "Other" ethnic category, White students, Filipino Americans, Indochinese Americans, and Asian Americans. Students in grade 9 were more likely to receive such a mark than were students in grades 7 or 11. Additionally, with the exception of math, a majority of students who failed to earn a passing grade also received either a "Needs Improvement" or "Unsatisfactory" citizenship mark.

23. Female students in grade 7 attained a *significantly* higher mean ASAT percentile rank than did their male counterparts in language and reading; females also attained a slightly higher mean rank in math. In addition, grade 7 students with certification for gifted education *significantly* outperformed other students.

24. In all three ASAT subject areas and at all three grade levels, students identified as Chapter 1 were *significantly* outperformed by other students.

Performance indicators that reflect college readiness among upper-grade level students showed that:

25. When compared with other student groups, a significantly smaller percentage of African American and Hispanic students completed UC a-f course work, enrolled in AP course work, or achieved a cumulative GPA of 2.0 or higher.

26. African American students demonstrated a nine percent gain among those attaining a 2.0 cumulative grade point average or higher, when compared with the previous year (1993-94 data).

27. The percent of Hispanic students with AP exam scores of "3" or higher was above the district average and roughly equal to that for White students (1993-94 data).

28. Asian American students demonstrated a gain of 12 percent among those completing UC a-f course work, when compared with the previous year (1992-93 data).

The analysis of interview and survey data suggests that:

29. Sites offer a broad range of programs which support students in their core course work. Forty-four percent of student respondents reported utilizing at least one such service — AVID, math and reading programs supported by Chapter 1 funds, and the Basic Skills Tutorial program (Chapter 2) in particular.

30. Roughly half of the teachers and all site administrators reported that successful support services at their sites had been identified and shared with teaching staff and governance teams. Fewer than one out of four teachers reported awareness of specific strategies to monitor either student participation in such support programs or the academic progress of these participants; all principals, however, identified such strategies at their sites.

31. Teachers reported, on average, that services to support students in their core curriculum have had a low to moderately positive impact on their academic performance, behavior, and attendance. Principals and counselors rated such impact in the moderately to highly positive range.

32. Roughly half of the teacher respondents indicated that they had participated in staff development activities related to the core curriculum during the past two years.

33. According to principals, six of the ten elementary study sites have implemented a method to document observable student behaviors on a developmental continuum within language arts instruction; plans at the other four sites to document such behavior have been developed. Curriculum staff reported that primary work in the area of language arts during the 1993-94 school year focused on the development of district standards and performance levels, which was intended to supplement the work completed on observable behaviors.

34. A decided majority of secondary-level principals, counselors, and teachers believe that "unnecessary prerequisites or lower level/remedial" courses in the four primary academic areas have been largely eliminated at their sites. However; roughly one out of four students believed that s/he had been required to take such a course; African Americans were disproportionately represented among this group. A similar proportion of students reported that they had been required to take a course that was "too difficult" (typically a mathematics course).

35. Sixty-five percent of the student respondents indicated that they had "as much access as other students to classes of (their) choice." Among students who questioned equitable access to course work, African American students were overrepresented.

36. Students reported, on average, that their parents and counselors provided "just a little" or "some" help in assisting them with course selection. The higher the grade level, the more likely students were to report making course selections independent of other advisors.

37. Among site principals and counselors who were interviewed, all but one believed that counselors *do not* have adequate time to counsel students "in a way that results in full preparation for graduation, college entrance, or meaningful employment."

38. While site staff identified a variety of ways that they have communicated the district's core curriculum policy to parents, only one out of three parent respondents and one out of five student respondents reported familiarity with the policy. A broad majority of parents (72 percent), however, indicated that they would like to know more about the policy.

39. Teachers were decidedly reserved in crediting the core curriculum policy for improving student motivation and career choices, lowering dropout rates, or increasing course work success. Their overall ratings of the policy's "low" positive impact on these outcomes fell well below the more "moderate" impact ratings provided by their principals.

40. A majority of student respondents believe that their course work reflects high expectations of them (67 percent) and is preparing them to meet graduation (81 percent) and college entrance (73 percent) requirements. Less than half the students (40 percent) reported that their course work is preparing them for meaningful employment after graduation from high school. Parent responses closely paralleled those of students.

41. Among the 17 percent of student respondents who reported that they have considered not completing high school, the two most frequently cited reasons included dissatisfaction with "boring or uninteresting" course work and course work that "took too much time."

42. Site administrators, counselors, and teachers identified (with no particular consensus) a broad range of constraints to implementing the core curriculum policy. At least 50 percent within each group agreed that the policy's implementation was constrained by (a) insufficient resources to support students in core courses and (b) the resistance of some students to be channeled into more difficult courses. A considerable proportion of respondents, particularly teachers, additionally identified (c) insufficient elementary preparation, (d) disinterested parents, (e) the inability of some students to achieve under heightened expectations, (f) the failure of the core curriculum to meet the needs of some students, and (g) the dire socio-economic environment of some students.

CONCLUSIONS

Longitudinal study data which focused on math course enrollment showed that, for many students, course enrollment at grade 7 is somewhat predictive of math enrollment and achievement patterns throughout high school. When compared with seventh-grade students who were enrolled in Advanced Math Junior High, a higher proportion of students who were enrolled in Math 7 earned lower math course marks, earned lower citizenship marks, were enrolled in course work intended for earlier grade levels, completed a less advanced pattern of course work, were retained at grade level, fell short of graduation requirements, and dropped out of school. The six-year study also revealed that students who were enrolled in Math 7 generally remained in the regular math sequence through high school; roughly half of the students who were enrolled in the advanced math pattern at grade 7 also later crossed over to the regular math sequence. In other words, a broad majority of this cohort either remained within the regular math course pattern or abandoned the advanced math sequence to enroll in less rigorous work. However, while many students fell short of more advanced math course work, most students in the cohort had taken at least one college preparatory math course (College Math or higher) prior to graduation.

Study data revealed that "remedial or lower-level" course work at the secondary level has been removed from the language arts, math, science, and social studies/history curriculum; very limited exceptions represent special language needs. The elimination of such course work has had understandably little impact on successful students. But many study subjects questioned the wisdom of such a policy with respect to students who are struggling in their core course work and have experienced repeated failure. Remediation efforts for these students presently rely on a variety of support services and bridging practices. Teachers' perceptions and course grades suggest that these safety nets must be strengthened.

Enrollment and achievement data suggest that the core curriculum policy has not fully eradicated academic "stratification" (as identified in the literature). African American and Hispanic students continue to be considerably overrepresented in courses intended for earlier grade levels and in retention and dropout statistics; English Language Learners are also overrepresented in less advanced course work. Asian American and White students, on the other hand, are overrepresented in advanced course work and earn higher course grades on average. A majority of study subjects agreed that students have access to a broad range of course enrollment opportunities and services which support them in core course work; a majority also believed that students are held to high expectations. Nonetheless, neither academic success nor upper-level course enrollment has as yet been the experience of *all* students.

Study data suggest that programming students into core course work that is "appropriate to their respective levels of preparation, motivation, and ability/achievement," as stated in the core curriculum proposal, is often difficult to implement. For the student who demonstrates a low level of *preparation* or *ability,* support services (when sufficient and utilized) provide needed assistance. But some students still fail despite these additional efforts, according to staff, and repeated failure undoubtedly reinforces dropout tendencies. The student with a low level of *motivation* also presents a serious though perhaps more frustrating challenge. Almost one out of five student respondents had considered not completing high school, and the reasons most frequently given were that their courses were "boring or uninteresting" or "took too much time."

The data additionally question the availability of sufficient counseling to assist students in selecting appropriate course work. A decided majority of principals, counselors, and teachers reported that counseling opportunities were inadequate for a student's "full preparation for graduation, college entrance, or meaningful employment." The data also question the effectiveness of support services intended to assist needy students in succeeding in their core course work. Acknowledging that such services have had only a modest influence on academic performance and attitude, site staff contend that insufficient resources have significantly limited their ability to effectively assist low-achieving students in this more rigorous curriculum. (To illustrate the competing demands for site resources, the recent "Review of the Initial Phase of the Implementation of the Class Size Reduction Policy" noted that, at some sites, class size reduction was achieved at the expense of valuable support programs and services.)

According to study data, disinterested or uninformed parents and the dispiriting socio-economic circumstances of many students also present formidable obstacles to academic success (and therefore the policy's effectiveness). Given the contributions of parent involvement and economic advantage in enhancing opportunity for academic success, effective support services and bridging practices to nurture the less prepared and less supported students become critical.

In contrast to the challenges posed by students who find their course work too difficult, it is also important to acknowledge a segment of the student population, and their parents (roughly 15 percent of both study groups), who believe that their core course work does *not* reflect high expectations of them; another 17 percent were "not sure" if their classes held them to high expectations. Similar sentiments were expressed by one in three teaching staff respondents who knew colleagues who were "reluctant to encourage more challenging work." Such practices raise concern about what the literature refers to as the "watering down" or "dumbing down" of the curriculum — a practice which turns the intent of the core curriculum policy on its head by *lowering* standards to the level of the less skillful at the expense of the more capable.

By most accounts, implementation of the policy has ensured access to a common core curriculum program and has eliminated a number of previously identified barriers. A number of sobering challenges to the practical application of this curriculum persist, however, at the student, staff, district, and community level. In the unfortunate climate of increased competition for diminishing resources, the district must determine how best to confront the issues within its control.

RECOMMENDATIONS

Drawing from evaluation findings, it is recommended that sites:

1. Continue efforts to bridge the gap between the academic achievement of African American and Hispanic students and that of other ethnic groups.

   Rationale: Although there was some variance depending on curriculum area and grade level, average course grades for African American and Hispanic students were *significantly* lower than those for other ethnic groups. In most core courses and at all three grade levels that were studied, Asian American, Indochinese American, Filipino American, and White students earned a course grade that was, on average, from one-half grade higher to more than one full grade higher than that earned by their African American and Hispanic classmates.

2. Embrace all opportunities for teaching staff to participate in staff development in language arts, math, science, social studies/history, cooperative learning, developmental learning, and other strategies which facilitate improved student achievement.

   Rationale: The core curriculum proposal acknowledged that "the district must ensure that the proposed change addresses teaching as well as content of courses." Teachers are encouraged to take advantage of training opportunities offered within the district and through professional organizations, as well as those provided by their own site programs, to improve teaching skills. In particular, acquisition of effective bridging practices are critical to the academic progress of less-prepared students.

   The "Critical Friend" and "1274 Protocol" processes also promote effective teaching and learning by facilitating honest dialogue about student work and progress toward site goals. These strategies of analysis have been implemented by many school systems that recognize the need for assessment feedback to evaluate learning.

3. Strengthen out-of-classroom support programs that assist students in their core curriculum course work.

   Rationale: The policy's steering committee aptly predicted that some students would experience considerable challenge given the higher level of difficulty reflected in the core curriculum policy and consequently require additional learning assistance. While sites have responded with a wide variety of programs to support these students, teaching staff believe that such services have only modestly impacted academic outcomes and student behavior. Reinforcing these support services may help to counteract a high rate of failing grades in core course work among various groups of students.

4. Build broader awareness among teaching staff about (a) which support services have proven most successful in assisting students in core course work and (b) how the site is monitoring the academic progress of students using these services.

Rationale: Only half the surveyed teachers reported that successful support services have been identified and shared with them, and only one out of five indicated knowledge of specific approaches to monitoring the academic progress of program participants. Support services will be most effective when the site (a) identifies successful programs among current offerings and shares this information with all teaching staff, and (b) establishes a system of monitoring both program participation and the academic progress of the participant.

5. Implement strategies to enroll and support English Language Learners in upper-level core curriculum course work, particularly beyond grade 7.

   Rationale: When compared with English-proficient students, English Language Learners beyond grade 7 (who have not yet achieved English-fluent status) were underrepresented in upper-level core curriculum courses. The percent of English Language Learners enrolled in Algebra 1-2 (22.6 percent) and in Biology 1-2 (24.7 percent) — both less advanced course work for grade 11 students — was almost twice that of other students. Second Language staff concur that English Language Learners will meet the challenge of more rigorous course work when it is accompanied by services that acknowledge their language needs.

6. Document the observable behaviors of elementary-level students on a developmental continuum for each primary subject area; include followup documentation at every grade level.

   Rationale: A 1992 study of student achievement, conducted by the Equity in Student Placement Practices Oversight Committee, revealed that academic stratification at the secondary level, manifested in course enrollment and achievement, begins as early as grade one. The practical classroom-level work of documenting observable behaviors at the elementary level, supplemented by the development of standards and performance levels, identifies the student's level of skill and the potential need for *early* intervention. Portfolio assessment, a component of the district *Plan to Improve Student Achievement, and Organizational Effectiveness,* can provide importance evidence of academic progress as a student makes the transition from grade to grade.

7. Strengthen the articulation process between grade levels to ensure enrollment in course work that is appropriate for the student's capabilities.

   Rationale: Study data showed that a majority of subjects believes that an inadequate articulation process between grade levels constrains the effective implementation of the district's core curriculum. A thoughtful review of a student's academic progress is critical to ensuring an appropriate course of study. Such an individualized approach identifies important distinctions among those who require intervention, those whose current pattern of course work appears appropriate, and those for whom more advanced work should be encouraged. Such an approach also assumes effective counseling services — and district resources to ensure them.

It is furthermore recommended that the district:

8. Continue to foster a climate of high expectations and high standards that assumes that students can and must work to their full capabilities in order to fully prepare themselves for meaningful employment or college enrollment following high school.

   Rationale: The core curriculum policy was founded on the premise that a strong academic curriculum was critical to post-secondary success and that support for such a curriculum required a strong consensus among district educators. The proposal initially urged a "public information campaign" to disseminate the core curriculum philosophy among teachers, principals, parents, and students. Considering numerous challenges to the policy's effective implementation, it may be timely to renew efforts to hold the ideal in focus.

   A renewed information campaign specifically targeting parents may be particularly useful, given that three out of four parent respondents indicated that they would like to know about the core curriculum policy. Furthermore, among those who reported that they were "not at all comfortable" advising their students about course selection, 82 percent said that they were unfamiliar with the policy.

9. Explore the literature generated by *resilience research* and research on *secondary cultural or language differences* for potentially effective strategies that can be shared with teaching staff through staff development inservices.

   Rationale: With its focus on the traits, coping skills, and supports that help students survive — even thrive — in a challenging environment, the products of resilience research may reinforce other efforts to promote heightened expectations and motivation for academic excellence. The literature notes that, while practices such as tracking, readiness testing, Chapter 1, special education, and ability grouping may serve the needs of some students, these measures are often inconsistent with the notions of "protective mechanisms" and "resilience" where greater attention is paid to inherent strengths and developed abilities.

   It may also be helpful to revisit the literature which focuses on assisting students with secondary cultural or language differences. For example, educators such as John Ogbu have argued that teachers and other interventionists must acknowledge that many children bring to school frames of references that are not only different from but oppositional to those of the mainstream (see earlier Summary of Relevant Literature). Specific strategies for assisting these children include teaching them to separate attitudes and behaviors enhancing school success from those that lead to linear acculturation (or "acting White") and to adopt a strategy of "accommodation without assimilation." In general, such strategies may generate improved student achievement by helping particular students to recognize and accept the fact that they can participate in two cultural or language frames of reference for different purposes without losing their own cultural and language identity or undermining their loyalty to the minority community.

10. Assess to what extent the proposed budget requirements for all five phases of the core curriculum policy's implementation were fulfilled (the proposal estimated $4.8 - $6.2 million) and to what extent present budget considerations will allow continued support.

Rationale: Board approval of the policy in 1988 was based on four assumptions, including a commitment of resources to ensure its successful implementation. The steering committee acknowledged that "a great deal of staff training (was) needed ... Tutorial and counseling support must be available for students ... Additional facilities and instructional materials may be required ... Special attention (must) be given to the increasing number of students with language needs who will require special support ... (The policy) will require a substantial budget for additional teachers and counselors, facilities, staff development, and instructional materials." Study sites noted the lack of such resources as a primary constraint to the full and effective implementation of the policy.

If financial support to improve services to students who require assistance in core course work is determined to be unavailable, it may be necessary to explore the efficacy of *required supplementary* course work to improve opportunity for success in core courses. An approach to curriculum delivery which honors equity and heightened expectations, but which also guarantees the basic foundations upon which academic success in core subjects can be realized, may ameliorate the insecurity and dissatisfaction of students at risk and improve their chance of experiencing their course work as both surmountable and relevant.

SAN DIEGO CITY SCHOOLS
Planning, Assessment, and Accountability Division
Standards, Assessment, and Integration Services Unit

FOLLOW-UP REPORT ON THE IMPLEMENTATION OF THE CORE CURRICULUM POLICY

January 9, 1996

ISSUE/CONCERN

In February 1988, the Board of Education adopted a core curriculum policy for all district schools. The implementation of the policy was reviewed by the Evaluation Department in 1990 and again by the Equity in Student Placement Practices Oversight Committee in 1992. The committee subsequently requested a follow-up evaluation to assess progress on the implementation of this policy.

PURPOSE OF THE STUDY

The Standards, Assessment, and Integration Services Unit has conducted a followup evaluation of the implementation of the core curriculum policy to examine (1) how sites define the core curriculum, (2) how sites promote enrollment and success in core courses, (3) the degree to which district students are participating in the core curriculum and programs which support it, and (4) the level of academic achievement of students enrolled in core courses. Part I provides an analysis of student enrollment and achievement data from 24 selected sites and follow-up data on a separate longitudinal analysis of the course enrollment and academic progress of a cohort of students graduating in Spring 1994. Part II provides an analysis of interview and survey data.

This formative study intends to assist the Board of Education and the Equity in Student Placement Practices Oversight Committee in assessing the degree to which the core curriculum policy has achieved its objectives to date and in identifying barriers which limit its potential for full and effective implementation.

SUMMARY OF RELEVANT LITERATURE

An Historical Perspective.

The meaning of *core* as applied to curriculum has shifted with socio-political pressures and educational trends. During educationally conservative times, the emphasis has been on academic achievement, curriculum, and discipline. The focus during more liberal times has been on equity for the disadvantaged and the need to expand the role of the school (Rachael, 1987).

Prior to the early 1900s, the secondary-level curriculum in the U.S. offered the classics, Greek and Latin composition, rhetoric, "natural" philosophy, French, ancient history, astronomy, and trigonometry. The words *core curriculum* carried no significance at that time; placed in front of *curriculum,* the word *core* would have been a "redundant adjective" (Goodlad, 1987).

The use of *core* in curriculum language coincided with rapid expansion of secondary school enrollment and varied from country to country. The original curriculum gave way to what the Boston Globe defined in 1907 as "the training of ordinary boys and girls to do the ordinary work of life." The Great Depression brought large numbers of young people into secondary schools who had not planned to be there and who had no plans for continuing into higher education.

This erosion of the original, broad curriculum resulted in a smaller nucleus of core courses necessary to meet university admissions requirements but also, for an increasing number of students, to meet changing circumstances in the workplace. With these changes in the organization of the traditional subjects came substantial infusion of vocational education. During this time, the core curriculum came to represent subject matter that was meaningful only as it helped the group to solve relevant problems (Goodlad, 1987).

During and following World War II, however, tests revealed high incidences of illiteracy and near-illiteracy among recruits, highlighting the dilemma over school quality. The launching of Sputnik in 1957 was the catalyst for many people in the U.S., particularly educators, to reconsider the core curriculum. Throughout most of the 1960s, the theme of educational reform was one of rising to meet the challenge posed by Soviet technology. The "new" curriculum was a return to subject matter, but with a decided emphasis on U.S. economic and technological status in international competition (Rachael, 1987).

The late 1960s and most of the 1970s were more liberal times, resulting in a shift in the focus of educational reform to addressing the plight of the disadvantaged.

> A multitude of federal programs emerged to provide services to the economically deprived (Title I, Head Start, etc.) and the handicapped (through special education programs). Additional efforts were directed toward the enhancement of vocational programs. In general, earlier and broader-focused schooling, along with an increased emphasis on relevance, were the pervasive themes of this turbulent period (Rachael, 1987).

This reform movement offered a revised core curriculum that was intended to improve the school performance of those minorities who had not traditionally done well in school. One assumption was that "fixing the schools" — intervention programs comprising a large part of the fix — would result in increasing numbers of minorities graduating from high school and college as well as entering the fields of math and science (Ogbu, 1992).

Critics of this curriculum reform denounced the tendency to identify — and track —two categories of students: "those who can learn and should work with their heads, and those who can learn and should work with their hands" (Goodlad, 1986-87). Data showed that

> ... A disproportionate number of students from low socioeconomic backgrounds and who, in turn, are disproportionately from ethnic minorities, are enrolled in that part of the curriculum designed to prepare for specific jobs (Ogbu, 1992).

It was also argued, however, that the ability of a core curriculum to increase the school performance of some minority groups would be limited until it addressed the nature of minority cultural diversity.

> Past experience with compensatory education and other remedial programs suggests that it is not enough to simply announce higher academic standards and expectations ... What the children bring to school — their communities' cultural models or understandings of 'social realities' and the educational strategies that they, their families, and their communities use or do not use in seeking education — are as important as within-school factors (Ogbu, 1992).

The *type* of minority group or minority status was the focus of a wide body of literature during the 1980s and early 1990s (DeVos, 1984; Fordham, 1984; Hirasawa, 1989; Ogbu, 1990; Shimahara, 1991; Gibson; 1991; Kristoff, 1992). These studies stressed that cultural and language differences alone cannot account for the relative school failure of some minorities and the school success of others. Ogbu's comparative study distinguished minority groups as either (1) autonomous, (2) immigrant or voluntary, or (3) castelike or involuntary minorities. Ogbu contended that the latter group presents the greatest challenge for educators.

> Castelike or involuntary minorities are people who were originally brought into the United States or any other society against their will ... through slavery, conquest, colonization, or forced labor. Thereafter, these minorities were often relegated to menial positions and denied true assimilation into the mainstream society. American Indians, Black Americans, early Mexican-Americans in the Southwest, and native Hawaiians are U.S. examples ... It is involuntary minorities that usually experience greater and more persistent difficulties with school learning (Ogbu, 1992).

Ogbu argued that the underlying factor that distinguishes conflicts in teaching and learning with respect to "involuntary minorities" is the nature of the relationship between the minority culture and the dominant Anglo American culture. School learning among such minorities

"tends to be equated with the learning of the cultural and language frames of reference of their 'enemy' or 'oppressors.'"

> The differences that are more problematic among involuntary minorities are differences in style ... It is more difficult for interventionists and teachers without special training to detect the problems and help the students (Ogbu, 1992).

Recognition of these distinctions added new dimensions to the evolving core curriculum debate. However, the most recent educational reform movement represents a shift back to that observed during the more conservative post-Sputnik era: schools are expected to hold all students to higher standards and to discontinue "social promotion." Furthermore, the Japanese Toyota replaced Sputnik as the symbol of America's inability to compete (Rachael, 1987). However, unlike the narrow focus of the 1950s and 1960s, present reformers advocate that all students be held to higher standards of performance.

> The primary reason given for (the) extensive accountability is that such standards are needed to ensure that all students are adequately prepared to meet the demands of an increasingly complex world. This current reform movement has become synonymous with excellence — or at least the expectation of excellence — for all (Rachael, 1987).

Concerns about the current direction of state and district efforts to establish a core of basic course work generally focus on (1) academic stratification (i.e., tracking in order to "water down" the curriculum), and (2) increased school failures and dropouts given increased expectations and standards. One concern of tracking is that those in the lower tracks who succeed in entering college often learn that they were short-changed in access to knowledge while in high school (Goodlad, 1987). On the other hand, "With Consequences for All," a 1985 report authored by the Association for Supervision and Curriculum Development (ASCD), warned that the push toward raising high school standards could "make a bad situation worse" for students at the bottom of the class. Goodlad (1985) argued that, for low-achieving students, increased standards is the equivalent of "moving the high jump bar up from four to six feet without giving any additional coaching to the youth who were not clearing the bar when it was set at four feet."

> Teachers facing more low-achieving students in academic classes will either have to simplify such courses or, if they elect to maintain standards, hand out discouraging grades to increasing numbers of students. If the courses are diluted, the top achievers will go unchallenged. On the other hand, if standards are maintained, the low achievers will be overwhelmed and frustrated (Rachael, 1987).

According to Rachael, most educators concur that higher standards can result in improved academic achievement. However, they also acknowledge that such performance cannot be realized unless all are assured of having an equal opportunity to meet these new expectations. Therein lies the current challenge; *little attention has been focused on how to provide such a guarantee.*

Toch (1984) suggested that lawmakers are largely responsible for the lack of attention to guaranteeing equal opportunity to achieve the new standards since they, not educators, have taken the dominant role in current reform efforts. The focus, Toch contended, has been on the length of the school day and school year, the cutoff scores on competency tests, and high school graduation requirements when the focus should have been on the content of courses in the prescribed core curriculum and how that content should be taught. Harkins (1986) concurs that the emphasis should be on the translation of the new requirements into innovative ways to challenge all students, to tap their potential, and to prevent them from dropping out by offering them a reasonable chance of success.

Recent Curriculum Reform in California

Curriculum documents, such as "Curriculum Frameworks" and "Model Curriculum Standards", were integral to reform strategy in California by the late 1980s. They were based on a broad definition of curriculum that encompassed specification of content knowledge, skills, and attitudes. Furthermore, the documents recommended a comprehensive plan for instruction in each subject area and were intended to provide the foundation for discussion and planning at local school districts.

Students have been encouraged to apply the skills and concepts from their academic study to problems of particular interest to them and, in doing so, to engage in learning that requires them "to delve deeper, project ahead, formulate recommendations, and communicate effectively with an audience" (Kierstead and Mentor, 1988).

> A vision of excellence for California schools has emerged in which all students — regardless of incoming level of performance — experience a common core curriculum that provides a sound academic background and promotes literacy in the various disciplines. In that curriculum, content and skill development go hand in hand (Kierstead and Mentor, 1988).

The reform effort that challenged students to become more thoughtful and creative has reverberated throughout the educational system. Teachers and administrators have been encouraged to use an even greater degree of creativity in their work. According to Kierstead and Mentor, where traditional approaches had treated curriculum planning and staff development as two separate enterprises, the reform incorporated an integrative approach that intended to create broader and more complex roles for administrators and teachers. As efforts in California have shifted to the district level, the reform has encouraged long-term, collaborative efforts (projects such as the California School Leadership Academy) to develop rich, varied, and ingenious classroom curriculum plans that "translate the vision for California students into reality."

> Defining a core curriculum of models and domains to be encountered commonly by all students is not easy. But implementing it creatively, with equality and equity for all students, is as demanding a human task as can be imagined (Goodlad, 1987).

Core Curriculum Policies and Student Achievement

Assessment of student performance based on recent core curriculum reform has received scant attention in the literature to date. To the extent that relevant studies can be found, the data are limited in scope of subject areas, span of grade level, and longitudinal significance. Moreover, given the simultaneous implementation of a number of important educational reforms in most school districts, it is unlikely that any one policy would definitively explain change in student achievement. Various aspects of curriculum reform research are currently being addressed at the Center on Organization and Restructuring of Schools at the University of Wisconsin, Madison, which may provide a future source of relevant data.

BACKGROUND INFORMATION

In February 1988, the district Board of Education adopted a common core curriculum policy intended to "prepare students for a job market that is becoming more technical, scientific, and managerial;" "ensure a literate citizenry for the survival of our democracy;" and "provide students with more opportunities through a broad liberal arts education" ("Proposal to Implement Common Core Curriculum," 1988). The policy sought the identification of a logical sequence of courses leading to post secondary endeavors, the strengthening of course content rather than increasing graduation requirements, and the adoption of a more challenging, rigorous course of study for all students. Full implementation of the common core curriculum at all secondary schools, beginning at the ninth grade level, was then scheduled for the 1989-90 school year to ensure that the 1994 graduating class would reflect the newly identified graduation requirements.

Since adoption of the policy, progress on the implementation of a core curriculum was assessed by the Evaluation Unit in 1989-90 ("Common Core Curriculum Pilot: First Semester Progress Report," June 1989, and "Common Core Curriculum, 1989-90 Report of Implementation," September 1990), and by the Equity in Student Placement Practices Oversight Committee in 1992 ("Common Core Curriculum," May 1992). Drawing on the findings, the reports recommended that:

- sites carefully monitor student participation in motivational programs;
- sites document the academic achievement of students participating in support programs to assess program impact;
- sites identify and share successful student support programs to promote success in core courses;
- sites record staff participation in staff development programs related to the core curriculum policy;
- elementary sites ensure that students are provided a developmentally appropriate curriculum, implying individualized instruction in non-graded, multi-level classrooms;

- follow-up evaluation assess the views of students, staff, and parents with regard to the core curriculum policy, focusing on the policy's impact on class failure, dropout tendencies, career choices, and motivation levels; and

- follow-up evaluation extend the longitudinal study of the 1994 graduating class.

Based on these recommendations and additional concerns identified by the Equity in Student Placement Practices Oversight Committee, the Standards, Assessment, and Integration Services Unit has conducted a followup evaluation of the implementation of the core curriculum policy.

It is important to note that the evaluation study was requested and designed prior to the adoption of the district *Plan to Improve Student Achievement and Organizational Effectiveness (1993)* and its related design tasks and expectations. Therefore, while the study addresses many issues covered by the five design tasks and 16 expectations, the evaluation plan does not specifically reflect the design task format.

EVALUATION METHODOLOGY

Part I

Fall 1993 Enrollment and Achievement Data. An analysis of enrollment and achievement data focused on *all* students enrolled in grades 7, 9, and 11 during the first semester of the 1993-94 school year at the 14 secondary-level sites which follow:

Bell	La Jolla	Pacific Beach
Correia	Lincoln	Pershing
Crawford	Mann	San Diego
Henry	Mission Bay	Wilson
Hoover	Morse	

These sites, in addition to ten elementary sites added in Part II data, were selected based on their overall ethnic representation which closely parallels that of the district, their broad geographic representation, and their representation of special programs (e.g., second language, magnet, VEEP, GATE, and special education).

Longitudinal Enrollment and Achievement Data. Follow-up data on a separate longitudinal analysis focused on the course enrollment and academic progress of a cohort of students who graduated in Spring 1994. This *districtwide* cohort was comprised of 6,700 students who were enrolled in either Math 7 or Advanced Math during the 1988-89 school year. As a result of subject attrition (i.e., losses resulting from factors such as transiency, dropout, and other criteria employed in the study's methodology), the number of the cohort had dropped to 3,857 when its performance was assessed in 1991-92 and to 2,334 for this followup.

The district's mainframe database, managed by the Information Services Bureau (ISB), provided course enrollment, course grades, and test results for the Abbreviated Stanford Achievement Test (ASAT), where available, and for students in the above-mentioned cohort in grade 12.

Course grades were not weighted to reflect the level of course difficulty. Where students were enrolled in more than one core course, all core course records were included in the analysis. Test data are presented in percentile ranks, based on normal curve equivalents (NCEs). All data were analyzed using the Statistical Package for the Social Sciences (SPSS).

It is important to note an important distinction in ethnic categories used in the two separate analyses presented in Part I. (1) Based on the methodological approach established by the Equity in Student Placement Practices Oversight Committee, ethnic categories reflected in the *longitudinal cohort analysis* were comprised of African American, Hispanic, White, and all "Other" students. (2) The *analysis of core course enrollment and achievement data for students in grades 7, 9, and 11 during Semester 1, 1993-94*, used an ethnic categorization with greater specificity to reflect African American, Asian American, Filipino American, Hispanic, Indochinese American, White, and all "Other" students.

Students who are identified as "English Language Learners" in this study are limited to those who have not yet achieved English-fluent status. Data for English Language Learners, therefore, should not be construed to represent *all* students in bilingual classrooms — some of whom have been reclassified as English-proficient but continue to benefit from bilingual instruction.

Part II

Interview Data. The study drew on interview data provided by site administrators and counselors (see Appendices A-C) at the secondary-level schools cited above in Part I, in addition to the following ten elementary schools:

Alcott	Florence	McKinley
Audubon	Jones	Oak Park
Central	Juárez	Penn
Clay		

Survey Data. Subjects of the student survey data were determined by a *random sample* of students attending the 14 secondary-level study sites in grades 8, 10, and 12 during the 1994-95 school year (n=2402); 1993-94 enrollment and achievement data for these three cohorts are analyzed in Part I when they were enrolled in grades 7, 9, and 11. Table A and Figure A provide the ethnicities, grade levels, and gender of the 377 student respondents. The data indicated that, when compared with district totals, African Americans and Hispanics were particularly underrepresented among student respondents; male students were also underrepresented. (The student survey instrument can be reviewed in Appendix D.)

The parents or guardians of this random sample of students (n=2402) were subjects of the parent survey (Appendix E). Table B and Figure B provide the ethnicities, grade levels, and gender of the 377 parent respondents. As with student survey responses, African Americans and Hispanics were particularly underrepresented.

Subjects of the teacher survey (Appendix F) included *all* secondary-level teachers at the 14 secondary-level study sites who taught a core curriculum course (n=540). Of the 137 teachers who responded to the survey, 60 percent indicated that they taught at the senior high level; the remaining respondents taught in junior high/middle schools.

Table A
STUDENT SURVEY RESPONDENTS BY ETHNICITY

Ethnicity	Percent	Number
African American	9.0	34
Filipino American	11.9	45
Hispanic	16.7	63
Indochinese American *	10.9	41
White	35.5	134
Other **	11.9	45
(Unidentified)	4.0	15
TOTAL	100.0	377

* Includes 12 Cambodian Americans, 6 Hmong Americans, 5 Laotian Americans, and 18 Vietnamese Americans

** Includes 2 Asian Indian Americans, 5 Chinese Americans, 3 Japanese Americans, 1 Native American, 10 White/Hispanics, 1 Guamanian/Korean American, 1 Iranian American, 1 African American/Asian Indian American, 1 White/Japanese American, 4 White/Native Americans, 5 White/African Americans, 1 White/Guamanian American, 1 Filipino/African American, 1 Chinese/Vietnamese American, 1 African/Native American, 1 Guamanian/African American, 1 Hispanic African American, and 1 White/Vietnamese American

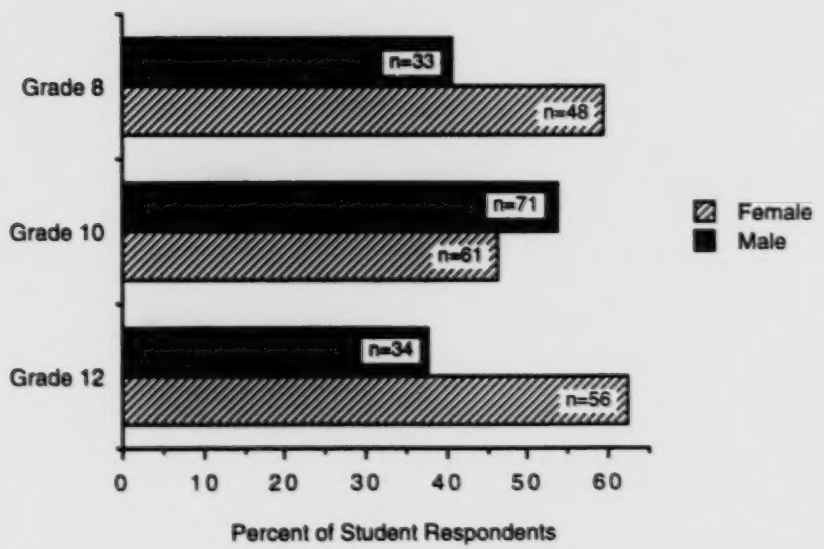

Figure A. Student Survey Respondents by Grade Level and Gender

(Note: One grade 7 student is included with grade 8 data; 3 grade 9 students are included with grade 10 data; and 2 grade 11 students are included with grade 12 data.)

Table B
PARENT SURVEY RESPONDENTS BY ETHNICITY

Ethnicity	Percent	Number
African American	9.0	34
Filipino American	10.9	41
Hispanic	20.4	77
Indochinese American *	8.8	33
White	36.1	136
Other **	10.3	39
(Unidentified)	4.5	17
TOTAL	100.0	377

* Includes 9 Cambodian Americans, 1 Hmong Americans, 6 Laotian Americans, and 17 Vietnamese Americans

** Includes 3 Asian Indian Americans, 4 Chinese Americans, 3 Japanese Americans, 2 Native Americans, 8 White/Hispanics, 1 Guamanian/Korean American, 1 Iranian American, 1 African American/Asian Indian American, 1 White/Japanese American, 5 White/Native Americans, 5 White/African Americans, 1 White/Guamanian American, and 1 Hispanic African American

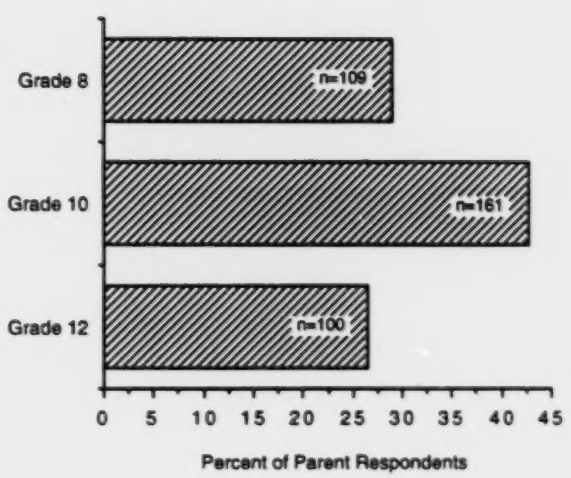

Figure B. Parent Respondents by Student Grade Level

(Note: The parents of four grade 7 students are included with grade 8 data; the parents of five grade 9 students are included with grade 10 data; and the parents of three grade 11 students are included with grade 12 data.)

FINDINGS: PART I

Cohort Analysis

As part of its 1992 "Common Core Curriculum Report," the Equity in Student Placement Practices Oversight Committee initiated a longitudinal analysis of core course enrollment for a cohort of students who were enrolled in grade 7 during the first semester of the 1988-89 school year. This cohort represents the 1994 graduating class, whose course work should ideally reflect five years of core curriculum implementation (1989-90 through 1993-94). The analysis focused specifically on mathematics enrollment patterns because, according to the committee, "mathematics offers greatest differentiation in enrollment options."

Consistent with the committee's prior analysis, the data herein represent math course enrollment patterns for first semester at grade 7, grade 10, and grade 12. Original cohort subjects represented two groups of grade 7 students: those who were enrolled in Math 7, characterized by the committee as a "regular" math course offering (Group 1); and those who were enrolled in Advanced Math Junior High, characterized as an accelerated course attended predominately by GATE-identified students (Group 2). In addition, the analysis established ethnic categories comprised of African American, Hispanic, White, and "Other".

Of the original cohort, the committee's analysis excluded students who were retained at grade level, as well as students who "moved out of normal course sequences (either ahead or behind) for a variety of reasons and (were) enrolled in term 1 in courses that would normally be offered in term 2." Additional subject attrition over the course of the study resulted from factors such as moving out of the district, being retained at grade level, or dropping out of school.

Table 1 provides a tabulation of factors contributing to subject attrition since baseline data were collected for the first semester of the 1988-89 school year. The data show that students in Group 1 (i.e., those who were originally enrolled in Math 7) are disproportionately represented among those who either dropped out of school or were retained at grade level. (Note: The data for "Moved" and "Dropped" were adjusted to reflect *reactivated* enrollment status, i.e., a return to district schools, for 137 students who were earlier reported as dropped in the committee's 1992 study, and for 127 students who were earlier reported as transferred out of the district.)

Table 1
SUBJECT ATTRITION IN COHORT STUDY, First Semester, 1988 - First Semester, 1993

Group	Moved*		Dropped†		Retained at Grade∞		Fell Out of Sequence‡		Total Cumulative Attrition	
	n	%	n	%	n	%	n	%	n	%
1/Regular	671	14.8	701	15.4	387	8.5	430	9.5	2189	48.1
2/Advanced	186	8.6	227	10.5	41	1.9	169	7.9	623	28.9

* Transferred out of district
† Reported either (1) "Dropped," (2) "Dropped, whereabouts unknown," or (3) "Whereabouts unknown"
∞ Were not advanced to next grade in logical sequence
‡ Moved out of normal course sequences (either ahead or behind); enrolled during term 1 in course that would normally be offered in term 2. This category also represents 30 students who graduated early (16 from Group 1 and 14 from Group 2).

Figure 1 provides the percent of the original cohort of 6,700 students, by ethnicity and gender, who either dropped out or were retained since 1989 baseline data were established. (The reader is reminded that ethnic categories, established in the Equity in Student Placement Practices Oversight Committee's analysis, are comprised of African Americans, Hispanics, Whites, and all "Others.")

Dropouts. The data indicated that the percent of students who dropped out of school during the course of the study was highest among Hispanics (15.8 percent), followed by White students (14.1 percent), African Americans (13.9 percent), and students in the "Other" ethnic category (11.1 percent). With the exception of Hispanic students, males were disproportionately represented among those who dropped out, particularly among White students (15.5 percent of males, as compared to 12.8 percent of females).

Retentions. African American and Hispanic students were two to three times more likely to be retained at grade level than were White students and students in the "Other" ethnic category. As with those who dropped out, males were overrepresented among this group.

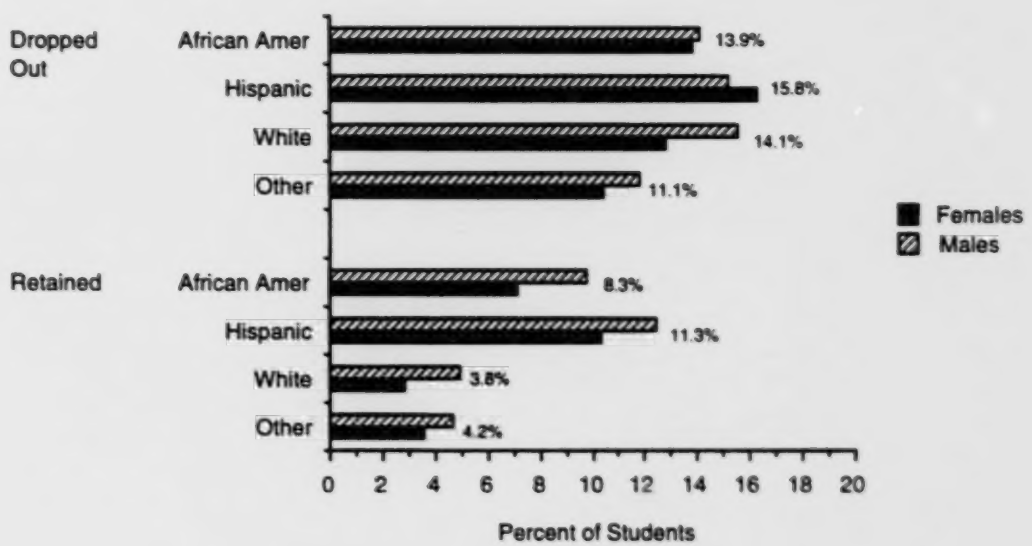

Figure 1. Percent of Cohort Students Who Dropped Out or Were Retained, by Ethnicity and Gender

In addition to the aforementioned attrition, another 1,554 students in the cohort were no longer enrolled in math course work during the first semester of the 1993-94 school year. Consequently, reflecting the same methodological approach to subject attrition employed in the 1992 study, the followup analysis herein includes data for 2,334 students of the original cohort of 6,700.

To better understand the analysis of the cohort's math course enrollment, the Secondary Mathematics Course Sequence, 1993-94, is provided in Figure 2. The course pattern on the left represents the anticipated sequence of math course work for students enrolled in Math 7 at grade 7 (Group 1). The pattern on the right represents the sequence expected for students enrolled in Advanced Math 7 at grade 7 (Group 2). The content of a number of courses in the advanced math sequence is *roughly* one year ahead of the regular sequence course work: for example Advanced Math 1 is comparable to Algebra 1. With higher level courses, however, the level of textbook difficulty diminishes comparability between Advanced Math 3-4 and Intermediate Algebra 1-2 , and between Advanced Math 5-6 and Geometry 1-2.

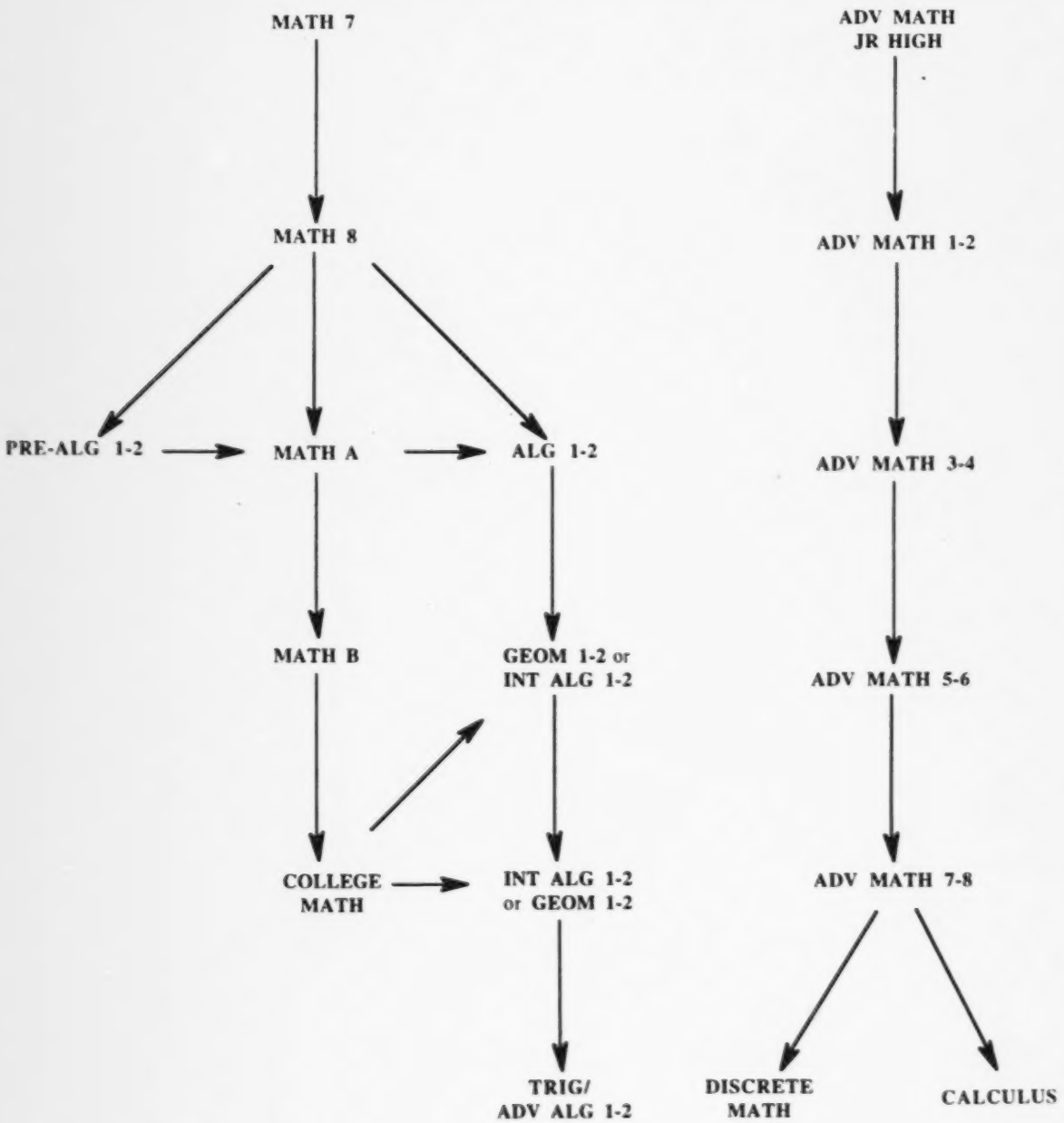

Figure 2. Secondary Mathematics Course Sequence (Mathematic Department, 1993-94)

Table 2 provides the percent of students enrolled in various math courses for the first semester of grades 7, 10, and 12, by cohort group; all math course offerings are "core" courses.

Group 1: Grade 10. The data showed that, by grade 10, *Group 1* students who were still actively enrolled (n=2371)) remained largely in the "regular" math sequence; only three percent had crossed over to course work assigned to the "advanced" math pattern shown in Figure 2 (specifically, Advanced Math 5). A majority (75.4 percent) was enrolled in courses that reflected orderly progress through the "regular" sequence, reaching either Algebra 1 or Geometry 1/Intermediate Algebra 1, the highest level course work within the "regular" math sequence for grade 10.

The remaining 21.6 percent of Group 1 demonstrated more modest progress and were enrolled in either Pre-Algebra 1-2 or Math A. A separate analysis showed that this latter group was characterized by a considerable increase in the proportion of Hispanic students, when compared with the baseline ethnic census of Group 1; the proportion of African American students increased only slightly, while the proportion of White and "Other" student groups declined.

Grade 12. By grade 12, of students in Group 1 who were still actively enrolled (n=1279), roughly 75 percent were enrolled in upper-level course work in the "regular" math sequence, a majority of whom were taking either Intermediate Algebra 1/Geometry 1 or Trigonometry/Advanced Algebra 1. Seven percent of Group 1 students were enrolled in courses in the "advanced" sequence.

As noted at grade 10, roughly 20 percent of students in Group 1 progressed through the "regular" sequence much more slowly, clustered at grade 12 in math courses typically planned for ninth and tenth grade enrollment (Pre-Algebra 1, Math A, Math B, and Algebra 1). Roughly 73 percent of students in Group 1 attained the College Math course level or higher.

Group 2. Grade 10. Data for *Group 2* students who were still actively enrolled at grade 10 (n = 1486) showed that slightly less than half (47.7 percent) had remained in the "advanced" math sequence. The other 52.3 percent had crossed over to the "regular" math pattern, clustered primarily in the most accelerated courses (for grade level) in that sequence (either Geometry 1 or Int. Algebra 1). Nine percent of this crossover group, however, was enrolled in course work which reflected considerable deceleration (Pre-Algebra 1-2, Math A, or Algebra 1-2), particularly given their original enrollment in the "advanced" math pattern at grade 7.

A separate analysis showed that this latter group was characterized by a dramatic increase in the proportion of Hispanic and African American students

and a dramatic decrease in the proportion of White and "Other" student groups, when compared with the original ethnic census of Group 2.

Grade 12. By grade 12, 45 percent of Group 2 students who were still actively enrolled (n = 1039) were taking either Discrete Math or Calculus, the two most challenging courses in the "advanced" sequence. Another 30 percent was enrolled in Trigonometry/Advanced Algebra 1, the most difficult course in the "regular" sequence. A majority of the remaining students in Group 2 were enrolled in either Intermediate Algebra 1/Geometry 1 or College Math, which the regular sequence typically schedules for grade 11. Roughly 98 percent of (still active) students in Group 2 attained the College Math course level or higher by grade 12.

Table 3 focuses on math course enrollment at grade 12 for both groups, disaggregated by ethnicity.

Group 1. For the roughly 20 percent of students in Group 1 who progressed through the "regular" sequence more slowly than their classmates (clustered in Pre-Algebra 1, Math A, Math B, and Algebra 1), a disproportionately high number of African American and Hispanic students is noted. Of those enrolled in the most challenging math course work (Trigonometry through Calculus), students in the "Other" ethnic category, in particular, are disproportionately represented.

Group 2. Among the 2.5 percent of Group 2 students enrolled in the lowest-level course work at grade 12 (Pre-Algebra 1, Math A, Math B, and Algebra 1), the data revealed a disproportionately high number of Hispanic students. A decided majority of Group 2 students in all ethnicity groups was enrolled in the highest level course work (Trigonometry through Calculus); White students and students represented by the "Other" ethnicity category, however, were disproportionately represented at this level.

Table 2
MATH COURSE ENROLLMENT FOR STUDENT COHORT
Semester 1: Grades 7, 10, and 12

Group 1

Courses	Grade 7		Grade 10		Grade 12	
	%	n	%	n	%	n
Math 7	100.0	4548	—	—	—	—
Advanced Math Jr High	—	—	—	—	—	—
Pre-Algebra 1	—	—	5.9	139	0.8	10
Math A	—	—	15.7	372	1.7	22
Math B	—	—	—	—	10.7	137
Algebra 1	—	—	40.9	970	6.1	78
College Math	—	—	—	—	8.0	102
Geom 1/Inter Algebra 1	—	—	34.5	819	43.3	555
Trig/Adv Algebra 1	—	—	—	—	21.8	279
Advanced Math 5	—	—	3.0	71	0.2	2
Advanced Math 7	—	—	—	—	2.0	26
Discrete Math	—	—	—	—	2.5	32
Calculus	—	—	—	—	2.8	36
TOTAL	100.0	4548	100.0	2371	100.0	1279

Group 2

Courses	Grade 7		Grade 10		Grade 12	
	%	n	%	n	%	n
Math 7	—	—	—	—	—	—
Advanced Math Jr High	100.0	2152	—	—	—	—
Pre-Algebra 1	—	—	0.3	4	0.3	3
Math A	—	—	1.3	19	0.1	1
Math B	—	—	—	—	1.7	18
Algebra 1	—	—	7.1	105	0.4	4
College Math	—	—	—	—	6.2	64
Geom 1/Inter Algebra 1	—	—	43.7	649	13.9	144
Trig/Adv Algebra 1	—	—	—	—	30.7	319
Advanced Math 5	—	—	47.7	709	—	—
Advanced Math 7	—	—	—	—	1.8	19
Discrete Math	—	—	—	—	18.1	188
Calculus	—	—	—	—	26.9	279
TOTAL	100.0	2152	100.0	1486	100.0	1039

Table 3
MATH COURSE ENROLLMENT FOR STUDENT COHORT (First Semester, 1993-94)
By Group and Ethnicity

Group 1

Course	African Amer		Hispanic		White		Other	
	%	n	%	n	%	n	%	n
Pre-Algebra 1 Math A Math B Algebra 1	20.7	58	28.8	95	16.8	63	10.6	31
College Math Geometry 1 Intermediate Algebra 1	59.4	167	51.2	169	56.3	211	37.5	110
Trigonometry/Advanced Algebra 1 Advanced Math 5 Advanced Math 7 Discrete Math Calculus	19.9	56	20.0	66	26.9	101	51.9	152
TOTAL (Group 1)	100.0	281	100.0	330	100.0	375	100.0	293

Group 2

Course	African Amer		Hispanic		White		Other	
	%	n	%	n	%	n	%	n
Pre-Algebra 1	—	—	—	—	—	—	—	—
Math A	1.1	1	7.5	9	2.2	11	1.5	5
Math B	—	—	—	—	—	—	—	—
Algebra 1	—	—	—	—	—	—	—	—
College Math	—	—	—	—	—	—	—	—
Geometry 1	29.9	26	29.2	35	17.7	89	17.6	58
Intermediate Algebra 1	—	—	—	—	—	—	—	—
Trigonometry/Advanced Algebra 1	—	—	—	—	—	—	—	—
Advanced Math 5	—	—	—	—	—	—	—	—
Advanced Math 7	69.0	60	63.3	76	80.1	403	80.9	266
Discrete Math	—	—	—	—	—	—	—	—
Calculus	—	—	—	—	—	—	—	—
TOTAL (Group 2)	100.0	87	100.0	120	100.0	503	100.0	329

Table 4 provides the mean course grades achieved by students in Group 1 and Group 2 for core math courses in which they were enrolled during the first semester of the 1993-94 school year. The data indicated that, in Pre-Algebra through Intermediate Algebra 1, students in Group 2 generally earned a somewhat higher course grade than their counterparts in Group 1. However, at the Trigonometry/Advanced Algebra 1 level and up, students in Groups 1 and 2 earned comparable grades on average. The highest mean course grades were earned by students enrolled in the higher level math courses (Advanced Math 5 through Calculus).

Table 4
MEAN MATH COURSE GRADES (First Semester, 1993-94)
By Group

Course	Group 1		Group 2	
	Mean Grade∞	n	Mean Grade∞	n
Pre-Algebra	2.4	10	*	3
Math A	2.5	22	*	1
Math B	2.3	137	2.9	18
Algebra 1	1.7	78	*	4
College Math	2.1	102	2.6	64
Geometry 1	1.7	219	2.1	36
Intermediate Algebra 1	1.7	333	2.1	108
Trigonometry/Advanced Algebra 1	2.2	277	2.3	318
Advanced Math 5	3.0	2	†	—
Advanced Math 7	2.8	26	2.7	18
Discrete Math	3.3	32	3.3	188
Calculus	†	—	3.2	135
TOTAL	2.0	1267	2.6	893

∞ Where 4=A, 3=B, 2=C, 1=D, and 0=F
* The cell contained fewer than ten students.
† No course grades were recorded for this group of students.

Table 5 provides mean course grade data for cohort students, disaggregated by group and ethnicity. Within each ethnic group, students in Group 2 achieved higher math course grades, on average, than did students in Group 1. White students and students in the "Other" ethnicity category earned slightly higher mean course grades than did their African American and Hispanic classmates. The "Overall Mean" grades (bottom of Table 6) for White students (2.4) and students in the "Other" category (2.5) were roughly one-half grade higher than those for African American and Hispanic students (2.0).

Table 5
MEAN MATH COURSE GRADES FOR STUDENT COHORT(First Semester, 1993-94)
By Group and Ethnicity

Group 1

Course	African Amer		Hispanic		White		Other	
	Mean Grade∞	n	Mean Grade∞	n	Mean Grade∞	n	Mean Grade∞	n
Pre-Algebra 1 Math A Math B Algebra 1	2.0	58	2.1	95	2.4	63	2.2	31
College Math Geometry 1 Intermediate Algebra 1	1.6	166	1.7	167	1.9	211	2.0	110
Trigonometry/Advanced Algebra 1 Advanced Math 5 Advanced Math 7 Discrete Math Calculus	2.3	56	2.2	65	2.4	99	2.6	146
TOTAL MEAN (Group 1)	1.8	280	1.9	327	2.1	373	2.3	287

Group 2

Course	African Amer		Hispanic		White		Other	
	Mean Grade∞	n	Mean Grade∞	n	Mean Grade∞	n	Mean Grade∞	n
Pre-Algebra 1 Math A Math B Algebra 1	*	1	*	9	3.2	11	*	5
College Math Geometry 1 Intermediate Algebra 1	2.0	26	1.9	35	2.4	89	2.2	58
Trigonometry/Advanced Algebra 1 Advanced Math 5 Advanced Math 7 Discrete Math Calculus	2.7	55	2.6	66	2.8	319	2.8	219
TOTAL MEAN (Group 2)	2.5	82	2.4	110	2.7	419	2.7	282
OVERALL MEAN (Groups 1 and 2)	2.0	362	2.0	437	2.4	792	2.5	569

∞ Where 4=A, 3=B, 2=C, 1=D, and 0=F
* The cell contained fewer than ten students.

Table 6 provides the percentage of cohort students, disaggregated by ethnicity, who achieved a "C" grade or above in each math course. The data indicated that a greater percent of White students and students in the "Other" ethnicity category earned a "C" grade or higher (77.5 percent and 80.2 percent, respectively) than did African American and Hispanic students (63 percent and 64.9 percent, respectively). In Discrete Math and Calculus, however, a very high percentage of students in all ethnicity categories achieved at the "C" grade level or above.

Table 6
COHORT STUDENTS ACHIEVING "C" GRADE OR ABOVE (First Semester, 1993-94)
By Course and Ethnicity

Course	African Amer		Hispanic		White		Other	
	%	n	%	n	%	n	%	n
Pre-Algebra 1	—	—	100.0	2	88.9	8	100.0	1
Math A	88.9	8	100.0	7	83.3	5	100.0	1
Math B	66.7	18	77.4	48	92.9	39	76.0	19
Algebra 1	50.0	11	58.8	20	64.7	11	55.6	5
College Math	56.0	14	48.0	12	79.7	51	82.7	43
Geometry 1	50.8	32	49.3	34	58.3	49	60.0	24
Intermediate Algebra 1	55.8	58	56.4	62	64.5	198	62.8	49
Trigonometry/Advanced Algebra 1	73.1	57	69.4	59	76.8	192	77.3	143
Advanced Math 5	—	—	—	—	100.0	1	100.0	1
Advanced Math 7	66.7	4	50.0	3	85.7	12	94.4	17
Discrete Math	100.0	18	100.0	30	94.7	71	98.0	98
Calculus	88.9	8	81.8	9	97.6	81	93.5	58
All Courses	63.0	228	64.9	286	77.5	618	80.2	459

For the cohort students just described (i.e., those who were actively enrolled in math courses during grade 12), Figures 3 and 4 provide their average math course grades at grade 7, grade 10, and grade 12.

Group 1 (Figure 3). Average marks for all ethnic groups within Group 1 declined between grade 7 and grade 12; roughly one in every two students earned a lower mark at grade 12 than at grade 7. When compared with their African American and Hispanic classmates, students in the White and "Other" ethnic categories had higher overall marks at grade 7 but experienced the largest overall decline; consequently the gap between these two groups became smaller .

At all three grade levels, students in the "Other" ethnic category earned the highest overall grades, followed by White, Hispanic, and African American students. The data revealed that, when compared with their grade 7 mark, 28.7 percent of Group 1 students improved their grade 12 math mark ; another 26.1 percent maintained the same mark, and the marks of 45.2 percent declined.

When disaggregated by gender, the data for Group 1 revealed that females and males were comparably represented in improved or declining marks.

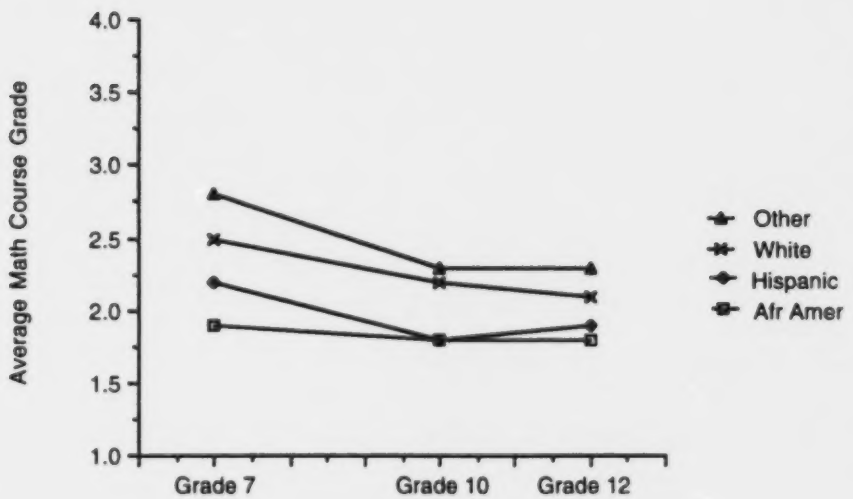

Figure 3. Average Math Course Grade for Group 1: Grade 7, Grade 10, and Grade 12

Group 2 (Figure 4). Overall grades for Group 2 students were higher than those for students in Group 1 at all three grade levels; students in the White and "Other" ethnic categories earned higher marks, on average, than did African Americans and Hispanics. Like Group 1, average marks for Group 2 students declined between grade 7 and grade 12, but to a lesser degree. The notable exception was African American students who raised their average mark slightly between grade 7 and grade 12 from 2.4 to 2.5.

When compared with Group 1, a comparable percentage of Group 2 students improved their marks (28.1 percent). Roughly one in every three students in Group 2 (34.9 percent) earned a lower course mark at grade 12 than they did at grade 7, and the marks of 37 percent remained unchanged. Like Group 1, a greater percentage of Group 2 students in the White and "Other" ethnic categories experienced declining marks over this period than did African American and Hispanic students. Females and males in Group 2 were comparably represented in improved or declining marks.

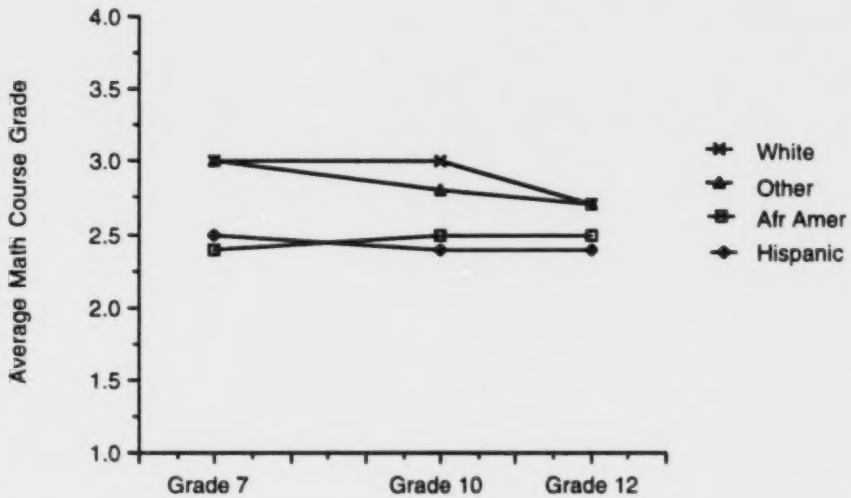

Figure 4. Average Math Course Grade for Group 2: Grade 7, Grade 10, and Grade 12

Table 7 provides the citizenship grades earned by cohort students, disaggregated by group and ethnicity, while enrolled in first semester math courses. The data indicated that, within each ethnic group, students in Group 2 earned, on average, higher citizenship grades than their counterparts in Group 1. In each group, students in the "Other" ethnicity category earned the highest overall citizenship grades, followed by White, Hispanic, and African American students. Overall (bottom of Table 8), the data showed that a much larger percentage of African American and Hispanic students were given "Needs Improvement" or "Unsatisfactory" citizenship grades than were White students and students in the "Other" ethnicity category.

Table 7
CITIZENSHIP GRADES FOR COHORT STUDENTS (First Semester, 1993-94)
By Group and Ethnicity

Group 1

Citizenship Grade	African Amer		Hispanic		White		Other	
	%	n	%	n	%	n	%	n
Excellent, Good, or Satisfactory	78.7	218	85.8	278	87.0	320	90.0	260
Needs Improvement or Unsatisfactory	21.3	59	14.2	46	13.0	48	10.0	29

Group 2

Citizenship Grade	African Amer		Hispanic		White		Other	
	%	n	%	n	%	n	%	n
Excellent, Good, or Satisfactory	85.7	72	88.3	98	92.7	408	93.6	291
Needs Improvement or Unsatisfactory	14.3	12	11.7	13	7.3	32	6.4	20

Both Groups

Citizenship Grade	African Amer		Hispanic		White		Other	
	%	n	%	n	%	n	%	n
Excellent, Good, or Satisfactory	80.3	290	86.6	380	90.2	733	91.9	554
Needs Improvement or Unsatisfactory	19.7	71	13.4	59	9.8	80	8.1	49

When enrollment status was examined at the conclusion of the 1993-94 school year, the data indicated that, overall, 92.4 percent of the cohort had graduated (89.4 percent of Group 1 students and 96.4 percent of Group 2 students). Table 8 shows that students in Group 1 were disproportionately represented among the 165 students who had not graduated because they had not completed requirements; all 165 represented students enrolled in alternative education programs. A breakdown by ethnicity showed that a disproportionate number of Hispanic students were among the "non-graduates." The data also indicated that the status of an additional five students was reclassified as "dropped out" or "whereabouts unknown" (two from Group 1 and three from Group 2) during Semester 2, 1993-94.

Table 8
GRADUATION STATUS FOLLOWING 1993-94 SCHOOL YEAR

Cohort Group	Graduate		Non-Graduate (did not complete requirements)	
	%	n	%	n
Group 1	89.4	1133	10.4	132
Group 2	96.4	973	3.3	33

Additional Analysis of Cohort Enrollment and Achievement

As previously mentioned, the original methodology of the study limited the review of math core course enrollment and achievement to the first semester at grades 7, 10, and 12. Because such a large number of students were no longer enrolled in a math course at grade 12, a separate analysis included students for whom *final* math course enrollment occurred during the 1992-93 school year. Table 9, therefore, reflects final math course enrollment for still active cohort students, *up to and including the first semester of the 1993-94 school year and regardless of grade level designation* (n=3302).

Not surprisingly, the data in Table 9 showed that the inclusion of students who did not choose to enroll in a math course at grade 12 decreased the overall percentage of students enrolled in the most advanced math courses, when compared with the former analysis which excluded them (see Table 3). Conversely, the percentage of students enrolled in math courses intended for lower grade levels significantly increased. In general, students in Group 2 were more likely to enroll in a fourth year of math (75.5 percent) than were students in Group 1 (66.4 percent).

Table 9
FINAL MATH COURSE ENROLLMENT FOR STUDENT COHORT By Group and Ethnicity
(Up to and Including First Semester, 1993-94)

Group 1

Course	African Amer		Hispanic		White		Other	
	%	n	%	n	%	n	%	n
Pre-Algebra 1-2 Math A Math B Algebra 1-2	31.7	126	43.5	228	26.4	159	16.6	67
College Math Geometry 1-2 Intermediate Algebra 1-2	53.9	215	43.6	229	55.7	336	43.5	174
Trigonometry/Advanced Algebra 1-2 Advanced Math 5-6 Advanced Math 7-8 Discrete Math Calculus	14.4	57	12.9	67	17.9	108	39.9	159
TOTAL (Group 1)	100.0	398	100.0	524	100.0	603	100.0	400

Group 2

Course	African Amer		Hispanic		White		Other	
	%	n	%	n	%	n	%	n
Pre-Algebra 1-2 Math A Math B Algebra 1-2	3.9	4	8.7	13	3.5	25	2.3	10
College Math Geometry 1-2 Intermediate Algebra 1-2	33.7	35	34.9	52	26.6	188	21.4	89
Trigonometry/Advanced Algebra 1-2 Advanced Math 5-6 Advanced Math 7-8 Discrete Math Calculus	62.4	65	56.4	84	69.9	495	76.3	317
TOTAL (Group 2)	100.0	104	100.0	149	100.0	708	100.0	416

Again using this more inclusive data that reflects *final* math course enrollment for all still active cohort students, Figure 5 provides the math course grade point averages for students in both groups by ethnicity. The data indicated that the GPAs are roughly comparable to those limited to first semester course marks at grade 12, as identified in Table 5.

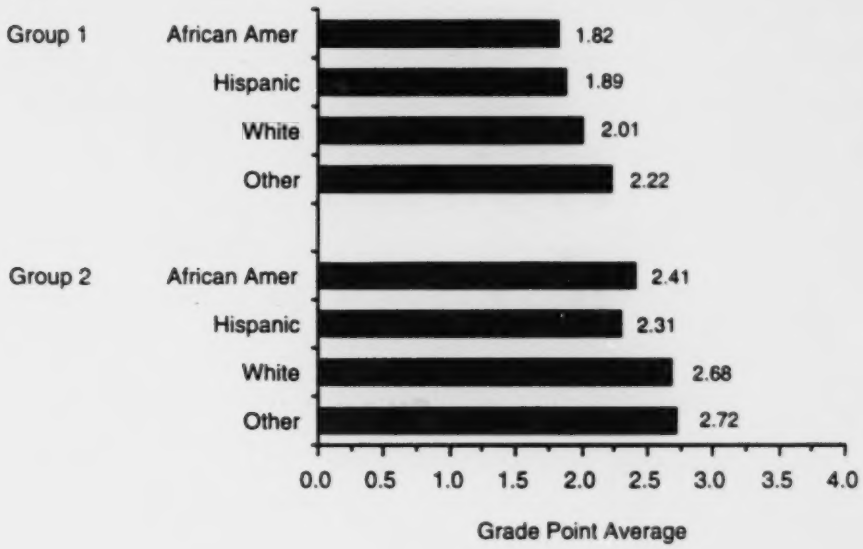

Figure 5. Grade Point Average in Final Math Course for Cohort Students

When these same "still active" students were included in the graduation data (Table 10), the data indicated that 91.5 percent of the cohort had graduated (88.1 percent of Group 1 students and 96 percent of Group 2 students). As in the previous graduation data, students in Group 1 were disproportionately represented among the 230 students who had not graduated because they had not completed requirements.

Table 10
GRADUATION STATUS FOLLOWING 1993-94 SCHOOL YEAR: Additional Analysis

Cohort Group	Graduate		Non-Graduate (did not complete requirements)	
	%	n	%	n
Group 1	88.1	1584	10.3	185
Group 2	96.0	1314	3.3	45

Analysis of Core Course Enrollment and Achievement at Grades 7, 9, and 11

Part I of the evaluation of the implementation of the core curriculum policy also examined core course enrollment and achievement of students in grades 7, 9, and 11 during the 1993-94 school year, as well as ASAT test results for all students in grade 7 and Chapter 1 students in grades 7, 9 and 11 (reflecting current district and federal testing policies at those grade levels). The data were limited to the selected sites mentioned in the Methodology section (six junior high/middle sites and eight senior high sites).

The data revealed that almost all students were enrolled in courses identified as part of the core curriculum in each subject area. Non-core enrollment largely represented special language needs (e.g., Beginning ESL, LEP/NEP English Skills, Newcomer Math). An exception is grade 7 enrollment in science: since science is not a required course at this grade level, all grade 7 science course work is considered non-core.

Tables 11-22 provide English, math, science, and social studies course enrollment by grade level for the first semester of the 1993-94 school year. A number of students was enrolled in more than one core course within a subject area; for these 297 students (primarily eleventh graders), all core course records were included in the analysis. Grade-level summaries for each subject area follow:

English

Grade 7. A broad majority of students was enrolled in English 7. Hispanics and Indochinese Americans were somewhat underrepresented in this course given their enrollment in ESL classes. Asian American students were overrepresented in English 7 Seminar.

Grade 9. Most students were enrolled in English 1-2, with the exception of a considerable percentage of Asian American, Hispanic, and Indochinese American students who were enrolled in ESL classes.

Grade 11. Most eleventh grade students were enrolled in either American Literature or Advanced American Literature. However, African Americans, Hispanics, and Indochinese Americans were underrepresented in Advanced American Literature.

Math

Grade 7. A broad majority of students was enrolled in either Mathematics 7 or Advanced Math Jr. High. Asian American and Filipino American students were particularly overrepresented in Advanced Math Jr. High.

Grade 9. A majority of Asian Americans, Filipino Americans, and White students was enrolled in either Algebra 1-2 or Advanced Math 3. African Americans, Hispanics, Indochinese Americans, and students in the "Other" ethnic category were largely enrolled in a less advanced cluster of courses — primarily Pre-Algebra 1-2, Math A 1-2, or Algebra 1-2.

Grade 11. By grade 11, a majority of students was enrolled in Geometry 1-2, Intermediate Algebra 1-2, or Advanced Math 7. A disproportionately high percent of African Americans and Hispanic students was still enrolled in much less advanced course work, primarily Math B 1-2 and Algebra 1-2. A disproportionate percent of Asian Americans, Filipino Americans, and White students was enrolled in more advanced course work (Advanced Math 7).

Science

Grade 7. Grade 7 enrollment was fairly evenly spread among four courses: Science 7, Science in Action, Explorer Science 7, and Marine Science. A tendency for Filipino American students to cluster in Science in Action (88.3 percent) and for Indochinese American students to cluster in Science 7 (72.2 percent) was the only trend noted.

Grade 9. Students in grade 9 were enrolled primarily in Physical Science 1-2 or Biology 1. Asian Americans, White students, and students in the "Other" ethnic category were disproportionately enrolled in Advanced Biology.

Grade 11. A majority of students was enrolled in either Chemistry 1-2, Physics 1-2, or Physical Science 1-2. Hispanic students, in particular, were overrepresented in Biology 1.

Social Studies

Grade 7. A broad majority of grade 7 students (97.8 percent) was enrolled in Social Studies 7; most of the remaining students were enrolled in Social Studies 7 Seminar.

Grade 9. Most students were enrolled in World History Geography Economics 1 (63.5 percent). Considerable numbers of students (primarily Asian Americans, White students, and students in the "Other" ethnic category) were also enrolled in either Advanced World History 1 or Global Political and Economic Decisions 1.

Grade 11. Grade 11 students were clustered primarily in U.S. History 1. Large numbers of Asian American, Filipino American, and White students were also enrolled in Advanced U.S. History 1 and AP American History.

Separate analyses of enrollment patterns by gender and by special populations (i.e., Chapter 1, English Language Learners, and gifted) were also performed. In reviewing these additional findings, it is important to note that *43 percent* of the students in this dataset who were designated as Chapter 1 were also English Language Learners who have not yet achieved English-fluent status.

Grade 7. Course enrollment for special education students paralleled that for the general population. Roughly half the English-learning population and one-quarter of Chapter 1 students were enrolled in English course work intended for students with special language needs, but enrollment for both groups in other subject areas largely paralleled that of the general population.

As expected, a much larger percent of students certified for gifted education was enrolled in Advanced Math Jr. High (85.6) than that of the general population (54.4 percent). No significant difference in enrollment patterns by gender for grade 7 students was noted.

Grade 9. When compared with math enrollment at grade 7, a much higher percent of special education students and English Language Learners who have not yet achieved English-fluent status was enrolled in a lower level of course work than was the general population. These two populations were also much more likely to be enrolled in Physical Science 1-2 and much less likely to be enrolled in Biology 1-2 than was the general population.

Grade 9 students with gifted certification were much more likely to be enrolled in advanced course work (specifically, English Seminar, Advanced Math 5, Advanced Math 7, Advanced Science 3, Advanced Biology 1, and AP Biology) than was the general population. No significant difference in enrollment patterns by gender for grade 9 students was noted.

Grade 11. A much higher percent of special education students was enrolled in English classes intended for earlier grade levels (primarily English 1-2 and English 3-4) than was the general population, and a lower percent was enrolled in American Literature 1-2. While most grade 11 students were enrolled in math courses at the Geometry 1-2 through Intermediate Algebra 1-2 level, special education students were much more likely to be enrolled in Math, Pre-Algebra 1-2, Math A 1-2, or Math B 1-2.

Nearly 40 percent of English Language Learners in grade 11 who have not yet achieved English-fluent status was enrolled in English course work intended for students with special language needs. The percent of non-fluent English Language Learners still enrolled in Algebra 1-2 (22.6 percent) and in Biology 1-2 (24.7 percent) — both less advanced course work for grade 11 students — was almost twice that of other students. While 25.8 percent of the general population was enrolled in either Advanced U.S. History 1 or AP American History 1, enrollment in those courses for English Language Learners was only three percent.

When compared with grade 9, a somewhat smaller percent of Chapter 1 students in grade 11 was enrolled in English course work intended for students with special language needs. When compared with the general population, Chapter 1 students were somewhat more likely to be enrolled in math courses intended for earlier grade levels (Math, Math A 1-2, Math B 1-2, or Algebra 1-2). This group was also more likely to be enrolled in Physical Science 1 (63.3 percent) and less likely to be enrolled in Biology 1 (15.0 percent) than was the general population (43.9 percent and 22.3 percent, respectively).

A much larger percent of grade 11 students with gifted certification was enrolled in Advanced American Literature 1 (67.2 percent) than was the general population (25.9 percent). This group of students was also overrepresented in AP and other advanced math and science courses. The only gender difference of significance was the disproportionate percent of females enrolled in Advanced American Literature 1.

Table 11
ETHNIC REPRESENTATION IN ENGLISH COURSES: (First Semester, 1993-94)
Grade 7

Course	African American (n=435)	Asian American (n=40)	Filipino American (n=282)	Hispanic (n=879)	Indochin American (n=360)	White (n=730)	Other (n=67)
Core							
English 7	90.1	70.0	95.4	67.7	65.0	93.0	92.5
Beginning ESL 7	3.7	7.5	—	10.0	5.8	0.7	4.5
Intermediate ESL 7	2.5	7.5	0.7	10.6	11.4	0.3	1.5
Advanced ESL 7	1.1	—	1.8	9.8	12.8	0.7	—
English 7 Seminar	1.8	15.0	1.8	1.4	4.7	5.2	1.5
Advanced ESL 8	—	—	—	0.1	—	—	—
ESL Beg Reading 6-8	0.2	—	—	—	—	—	—
ESL 1	—	—	—	0.3	—	—	—
ESL 5	—	—	0.4	—	—	—	—
Non-Core							
Beg ESL Commun 7	0.2	—	—	—	0.3	0.1	—
Reading 6 - 8	0.2	—	—	0.1	—	—	—

Table 12
ETHNIC REPRESENTATION IN ENGLISH COURSES: (First Semester, 1993-94)
Grade 9

Course	African American (n=618)	Asian American (n=40)	Filipino American (n=404)	Hispanic (n=882)	Indochin American (n=330)	White (n=727)	Other (n=51)
Core							
Advanced ESL 8	—	—	—	—	0.3	—	—
English 8	0.2	—	—	0.1	0.3	0.1	—
English 1-2	84.1	70.0	95.5	70.4	59.1	89.1	90.2
English Seminar 1	1.8	22.5	1.7	2.9	17.6	8.0	3.9
English 3-4	2.4	2.5	—	2.2	1.2	0.7	2.0
Advanced English 3	0.2	—	—	—	—	0.1	—
ESL 1	2.8	—	0.2	7.7	4.2	0.6	2.0
ESL 3	1.1	2.5	—	5.8	6.7	0.6	—
ESL 5	1.8	2.5	2.2	7.9	7.9	0.3	—
ESL Newcomer 9-12	3.9	—	—	1.0	0.3	0.3	—
World Literature 1	—	—	—	0.1	—	—	—
Non-Core							
English Lang Arts	0.5	—	0.2	1.0	0.9	0.1	—
LEP/NEP Engl Skills	1.0	—	—	0.6	1.5	—	—
Reading Developmt 1	0.3	—	—	0.1	—	—	—
Reading Improvemt 1	—	—	—	—	—	0.1	—
ESL Communic 3	—	—	—	—	—	—	2.0
Second Language	—	—	—	0.1	—	—	—

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Table 13
ETHNIC REPRESENTATION IN ENGLISH COURSES: (First Semester, 1993-94)
Grade 11

Course	African American (n=564)	Asian American (n=74)	Filipino American (n=324)	Hispanic (n=852)	Indochin American (n=312)	White (n=851)	Other (n=48)
Core							
English 1-2	1.8	1.4	0.6	2.3	2.2	0.1	2.1
English 3-4	3.7	1.4	0.6	3.3	4.5	1.3	2.1
Advanced English 3	0.2	—	—	—	—	0.1	—
ESL 1	—	—	—	0.6	0.3	0.1	—
ESL 3	0.7	—	0.3	7.2	7.4	—	2.1
ESL 5	1.6	5.4	0.6	7.4	9.3	0.2	6.3
ESL Newcomer 9-12	—	—	—	0.2	—	—	—
American Literature 1	68.6	29.7	55.9	64.1	54.5	44.4	47.9
Advanced Amer Lit 1	16.5	56.8	40.1	8.5	17.6	44.3	29.2
Cont Voices in Lit 1	0.7	—	—	0.4	0.3	0.5	2.1
Engl Lit 1 Cluster	—	—	0.3	0.1	—	0.5	—
World Literature 1	0.7	—	—	1.5	1.3	0.5	—
IB Lit of the Amer 1	4.1	4.1	—	2.8	1.9	6.3	4.2
IB English 1	0.2	—	—	—	—	—	—
Writers Workshop 1	0.2	—	—	1.2	0.3	0.8	2.1
Non-Core							
English Lang Arts	0.5	1.4	0.6	0.4	0.3	0.8	2.1
ESL Commun 3	—	—	—	0.1	—	—	—
Second Language	0.4	—	—	—	—	—	—

Table 14
ETHNIC REPRESENTATION IN MATH COURSES: (First Semester, 1993-94)
Grade 7

Course	African American (n=430)	Asian American (n=37)	Filipino American (n=282)	Hispanic (n=862)	Indochin American (n=352)	White (n=727)	Other (n=66)
Core							
Mathematics 7	43.3	24.3	8.2	58.2	51.4	41.1	48.5
Algebra 1-2	—	—	—	—	—	0.1	—
Adv Math Jr High	56.0	73.0	91.5	41.5	46.3	57.6	51.5
Advanced Math 1	0.5	2.7	0.4	0.1	2.0	1.0	—
Non-Core							
Newcomer Math 9-12	0.2	—	—	—	0.3	0.1	—
Basic Skills Math	—	—	—	0.1	—	—	—

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Table 15
ETHNIC REPRESENTATION IN MATH COURSES: (First Semester, 1993-94)
Grade 9

Course	African American (n=617)	Asian American (n=40)	Filipino (n=404)	Hispanic American (n=865)	Indochin American (n=320)	White (n=736)	Other (n=51)
Core							
Mathematics 8	—	—	0.2	0.1	0.6	0.1	—
Pre-Algebra 1-2	26.6	5.0	5.4	31.6	11.6	9.9	23.5
Math A 1-2	21.4	—	3.7	25.5	12.2	12.6	9.8
Math B 1-2	0.2	—	—	0.5	0.6	0.4	—
Algebra 1-2	35.3	27.5	55.4	32.4	39.7	41.3	45.1
Advanced Math 1	0.5	—	—	0.1	0.3	0.1	—
Advanced Math 3	8.6	42.5	32.7	6.9	0.3	29.5	—
Geometry 1-2	0.8	2.5	—	0.1	2.5	0.3	—
Intermed Algebra 1-2	0.2	7.5	1.7	0.6	3.8	0.4	—
Advanced Math 5	0.2	12.5	0.2	0.5	1.9	4.2	2.0
Advanced Math 7	—	2.5	—	0.1	0.3	0.4	—
Number Theory 1	1.1	—	—	0.3	—	—	—
Non-Core							
Mathematics	0.6	—	0.5	1.3	0.6	0.5	—
Newcomer Math 9-12	4.5	—	—	—	—	0.1	—

Table 16
ETHNIC REPRESENTATION IN MATH COURSES: (First Semester, 1993-94)
Grade 11

Course	African American (n=539)	Asian American (n=72)	Filipino American (n=319)	Hispanic (n=827)	Indochin American (n=292)	White (n=833)	Other (n=49)
Core							
Pre-Algebra 1-2	2.8	—	0.9	3.0	2.1	0.2	—
Math A 1-2	4.8	1.4	0.9	6.4	2.1	1.3	6.1
Math B 1-2	9.6	—	2.5	11.2	3.1	8.0	10.2
Algebra 1-2	14.8	1.4	5.0	20.9	7.9	8.2	8.2
Advanced Math 3	—	—	0.3	—	—	—	—
Math College Entr 1	0.2	1.4	—	0.4	—	0.8	—
Geometry 1-2	39.0	12.5	47.3	28.2	36.6	19.6	24.5
Intermed Algebra 1-2	18.2	18.1	10.7	21.3	27.7	30.3	24.5
Trig/Adv Algebra 1	2.0	9.7	9.1	1.3	3.8	3.8	6.1
Advanced Math 5	1.3	1.4	0.3	1.0	0.7	0.6	—
Advanced Math 7	5.4	38.9	21.6	4.4	14.7	23.5	14.3
Topics Disc Math 1	—	2.8	—	0.4	—	0.4	—
AP Math 1	0.2	—	0.3	—	0.7	0.5	—
IB Math Studies 1	0.4	—	0.3	—	—	0.2	—
IB Math Calculus 1	—	2.8	0.3	—	—	0.8	2.0
Non-Core							
Mathematics	1.3	1.4	0.3	1.6	0.3	0.4	4.1
Honors Calc (Coll credit)	—	8.3	—	—	0.3	1.3	—

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Table 17
ETHNIC REPRESENTATION IN SCIENCE COURSES: (First Semester, 1993-94)
Grade 7

Course	African American (n=233)	Asian American (n=14)	Filipino American (n=154)	Hispanic (n=424)	Indochin American (n=234)	White (n=358)	Other (n=25)
Core							
Life/Phys Science 8	—	—	0.6	—	—	—	—
Earth/Phys Science 8	—	—	—	0.2	—	—	—
Non-Core *							
Marine Science	21.0	14.3	0.6	16.3	22.6	5.9	8.0
Explorer Science 7	10.3	35.7	6.5	25.9	2.1	45.3	56.0
Science 7	36.9	35.7	3.9	40.1	72.2	21.8	4.0
Science in Action	31.8	14.3	88.3	17.5	3.0	27.1	32.0

* Science course work is not required at grade 7 and, therefore, is referred to as non-core.

Table 18
ETHNIC REPRESENTATION IN SCIENCE COURSES: (First Semester, 1993-94)
Grade 9

Course	African American (n=188)	Asian American (n=18)	Filipino American (n=144)	Hispanic (n=293)	Indochin American (n=150)	White (n=271)	Other (n=13)
Core							
—	0.5	—	0.7	0.3	—	—	—
Earth/Phys Science 8	—	—	—	—	0.7	—	—
Advanced Science 1	—	—	—	—	—	0.4	—
Advanced Science 3	4.8	16.7	2.1	6.5	28.0	12.5	7.7
Science 8	—	—	—	—	0.7	—	—
Life Science 1	2.1	5.6	0.7	1.4	0.7	0.4	—
Biology 1	16.5	33.3	60.4	13.3	6.0	24.4	15.4
Advanced Biology 1	1.1	27.8	0.7	1.4	1.3	20.3	15.4
AP Biology 1	—	—	—	—	—	3.0	7.7
Chemistry 1-2	—	—	0.7	—	0.7	0.7	—
Adv Chemistry 1	—	—	—	—	0.7	—	—
Physical Science 1-2	54.8	—	19.4	69.3	44.7	24.4	46.2
Physics 1	12.2	11.1	14.6	7.2	15.3	12.9	7.7
Environmental Sci 1	5.9	5.6	—	—	0.7	—	—
Non-Core							
Science	1.6	—	0.7	0.7	—	0.7	—
Intro Med Science 1	0.5	—	—	—	—	—	—
Science Research Tech	—	—	—	—	0.7	0.4	—

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Table 19
ETHNIC REPRESENTATION IN SCIENCE COURSES: (First Semester, 1993-94)
Grade 11

Course	African American (n=451)	Asian American (n=69)	Filipino American (n=267)	Hispanic (n=639)	Indochin American (n=237)	White (n=694)	Other (n=39)
Core							
Life Science 1	3.5	—	1.5	3.3	3.0	1.4	5.1
Biology 1	14.9	4.3	6.0	23.8	11.4	7.1	12.8
Advanced Biology 1	2.0	4.3	—	0.6	2.5	4.8	5.1
Physiology 1	2.2	1.4	5.6	1.7	1.7	4.0	5.1
AP Biology 1	0.4	8.7	1.1	0.6	0.4	2.4	2.6
IB Biology 1	0.2	—	—	—	0.8	0.1	—
Chemistry 1-2	27.3	26.1	40.4	18.5	27.8	27.7	17.9
Advanced Chemistry 1	3.3	13.0	2.2	1.7	6.8	11.2	5.1
AP Chemistry	0.2	4.3	1.9	0.2	1.3	1.6	2.6
Physical Science 1-2	19.1	4.3	5.6	21.1	16.0	9.1	17.9
Physics 1	24.4	18.8	27.7	26.3	24.1	22.8	17.9
Advanced Physics 1	—	—	—	—	—	1.6	—
AP Physics 1	1.6	11.6	1.9	0.9	3.0	3.5	2.6
IB Physics 1	—	—	—	—	0.4	—	—
Marine Science 1	0.2	1.4	3.0	0.8	—	2.0	—
Environmental Sci	0.2	—	1.5	0.3	—	0.3	5.1
Non-Core							
Science	0.4	—	0.4	0.2	0.4	0.1	—
Intro Medical Science	—	—	—	—	0.4	—	—
Science Research Tech	—	1.4	—	—	—	0.1	—
Aeronautics 1	—	—	1.1	—	—	0.1	—

Table 20
ETHNIC REPRESENTATION IN SOCIAL STUDIES COURSES: (First Semester, 1993-94)
Grade 7

Course	African American (n=412)	Asian American (n=37)	Filipino American (n=281)	Hispanic (n=812)	Indochin American (n=307)	White (n=722)	Other (n=62)
Core							
Social Studies 7	98.8	94.6	98.2	99.6	96.7	95.3	100.0
Soc Stud 7 Seminar	1.0	5.4	1.8	0.2	2.6	4.6	—
Newcmr Cultrl Std 9-12	0.2	—	—	—	0.3	0.1	—
Non-Core							
International Studies	—	—	—	—	0.3	—	—
Introduction to Share	—	—	—	0.1	—	—	—

Table 21
ETHNIC REPRESENTATION IN SOCIAL STUDIES COURSES: (First Semester, 1993-94)
Grade 9

Course	African American (n=531)	Asian American (n=34)	Filipino American (n=365)	Hispanic (n=754)	Indochin American (n=271)	White (n=628)	Other (n=47)
Core							
Newcmr Cultrl Std 9-12	5.1	—	—	1.2	0.7	0.3	2.1
US History 8	0.2	—	0.3	0.3	0.7	0.2	—
World Hist Geog Econ	68.0	32.4	74.0	71.8	55.7	48.6	68.1
Adv World History 1	10.2	52.9	18.6	10.2	11.1	38.4	19.1
Glob Pol/Econ Decsn	16.2	14.7	7.1	16.0	31.7	12.6	8.5
US History 1-2	0.4	—	—	0.5	—	—	—
Economics 1	—	—	—	—	—	—	2.1

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Table 22
ETHNIC REPRESENTATION IN SOCIAL STUDIES COURSES: (First Semester, 1993-94)
Grade 11

Course	African American (n=530)	Asian American (n=73)	Filipino American (n=321)	Hispanic (n=798)	Indochin American (n=287)	White (n=841)	Other (n=49)
Core							
World Hist Geog Econ	1.9	—	0.9	2.6	1.7	1.3	4.1
Adv World History 1	—	—	—	0.1	0.3	—	—
IB Cont World Hist	0.2	—	—	—	—	—	—
Geo Political Econ	—	—	—	0.1	—	—	—
US History 1	76.8	38.4	58.6	82.6	76.0	47.2	67.3
Adv US History 1	5.3	9.6	34.3	5.5	4.2	19.5	10.2
AP American History	9.6	46.6	5.0	3.9	12.5	24.1	14.3
IB History of Amer	3.8	5.5	0.9	1.9	1.7	6.2	4.1
Government 1	1.3	—	—	2.1	2.8	0.6	—
Economics 1	1.1	—	0.3	1.1	0.7	0.6	—
IB Econ/Amer Govt	—	—	—	—	—	0.1	—
AP Cont Amer Govt/Pol	—	—	—	—	—	0.1	—
AP Economics	—	—	—	—	—	0.1	—
Non-Core							
Psychology 1	—	—	—	—	—	0.1	—

63A

Figures 6-17 provide average marks (where 4 = A, 3 = B, 2 = C, 1 = D, and 0 = F) earned in each subject area by grade level and by ethnic groups. Grade-level summaries follow:

Grade 7. The highest average course marks were in English (2.56), closely followed by science (2.54), social studies (2.48), and math (2.31). Asian Americans earned the highest course mark averages, followed by Indochinese Americans, Filipino Americans, students in the "Other" ethnic category, White students, Hispanics and African Americans. All ethnic groups achieved an average grade of "C" or above in all subject areas, with the exception of math where African American and Hispanic students earned a course mark average of 1.7 and 1.9, respectively.

Females significantly outperformed their male counterparts in all subject areas (p=.0000 for all four subjects). When compared with other students, the overall course marks for special education students were significantly lower and the overall marks for students with gifted certification were significantly higher in all four core curricula. Chapter 1 students also, on average, earned significantly lower course marks than did other students. English-proficient students earned only slightly higher average marks than did English Language Learners, with the exception of science where English Language Learners significantly outperformed their English-proficient classmates (p=.0036).

Grade 9. Students in grade 9 earned highest average marks in social studies (2.3), followed by science (2.24), English (2.23), and math (2.0). The highest average marks were earned by Asian Americans, followed by Indochinese Americans, Filipino American and White students. Depending on subject area, Hispanics, African Americans, and students in the "Other" ethnic category earned the lowest average course marks.

As in grade 7, females in grade 9 significantly outperformed males in all core curricula. Special education and Chapter 1 students earned significantly lower marks, on average, than students without such designation, and the average grades of students with gifted certification were significantly higher than other students. English-proficient students in grade 11 significantly outperformed English Language Learners in English course work; average performance by English-proficient students in other subject areas was also considerably higher than their English-learning classmates.

Grade 11. Overall course marks for students in grade 11 were highest in social studies (2.4), followed by English (2.34), science (2.28), and math (2.1). Reflecting the pattern at other grade levels, Asian Americans earned the highest average grades in all four subjects, followed by either Indochinese Americans or White students, Filipino Americans, students in the "Other" ethnic category, Hispanics, and African Americans.

Grade 11 females significantly outperformed males in all subject areas (p=.0000). The averages marks of Chapter 1 and special education students were significantly lower than other students (p=.0000 in all courses), and students with gifted certification significantly outperformed other students (p=.0000 in all subject areas).

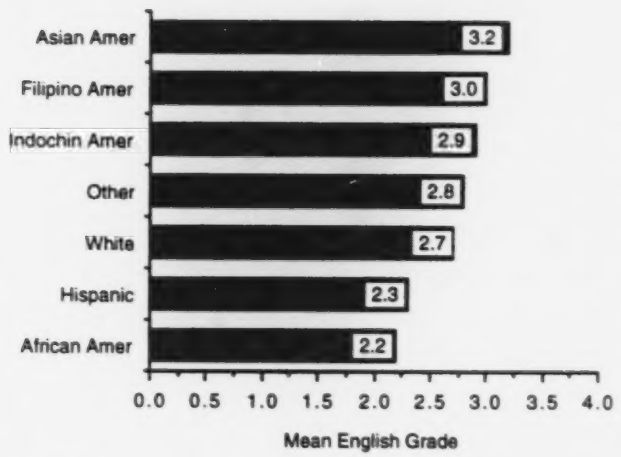

Figure 6. Mean English Grade, First Semester 1993-94: Grade 7

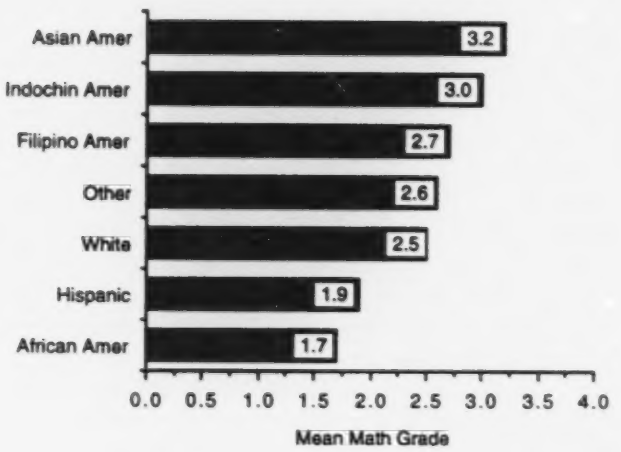

Figure 7. Mean Math Grade, First Semester 1993-94: Grade 7

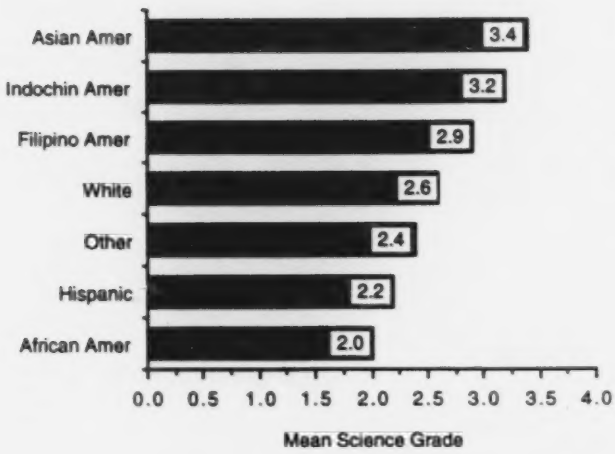

Figure 8. Mean Science Grade, First Semester 1993-94: Grade 7

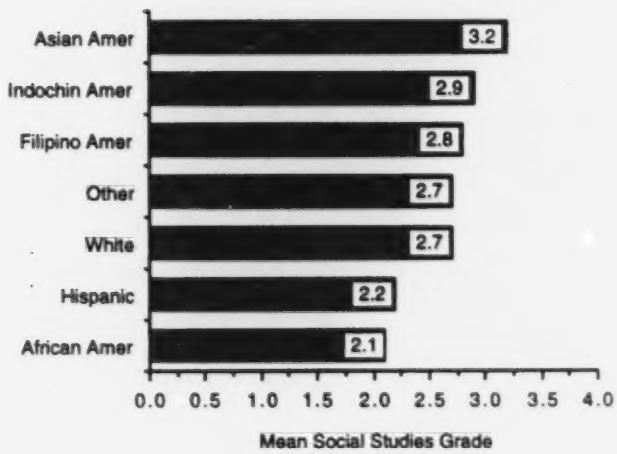

Figure 9. Mean Social Studies Grade, First Semester 1993-94: Grade 7

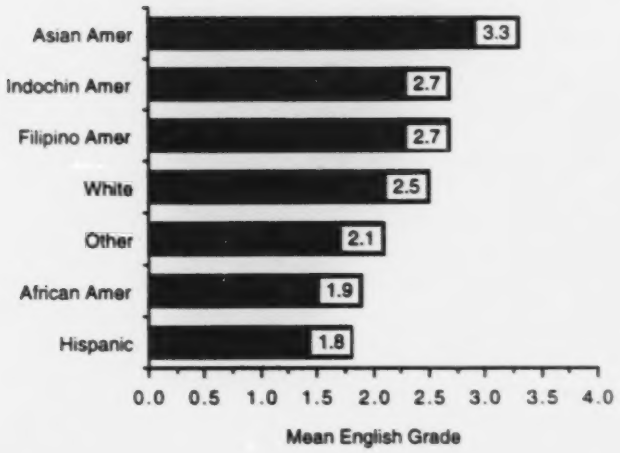

Figure 10. Mean English Grade, First Semester 1993-94: Grade 9

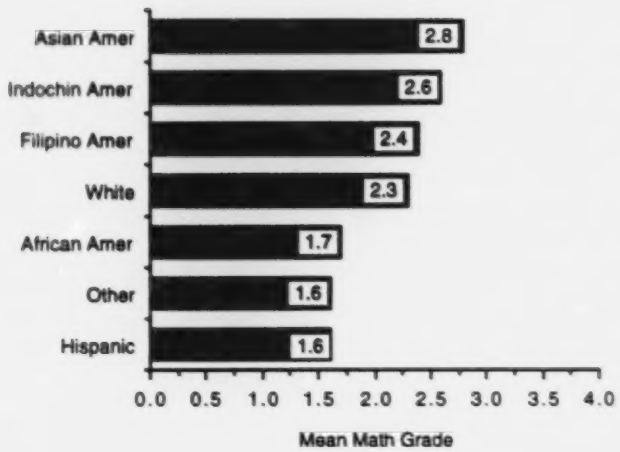

Figure 11. Mean Math Grade, First Semester 1993-94: Grade 9

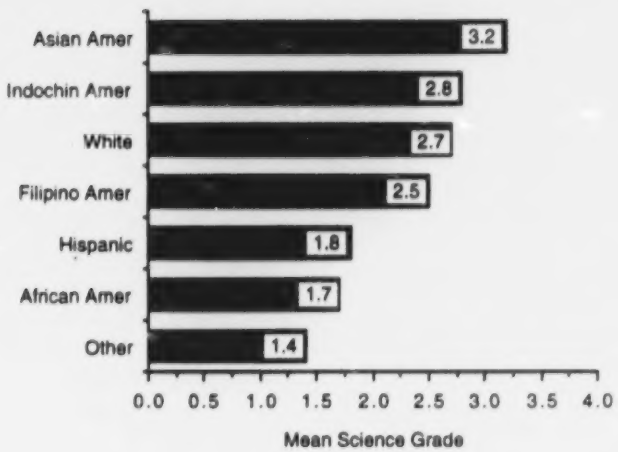

Figure 12. Mean Science Grade, First Semester 1993-94: Grade 9

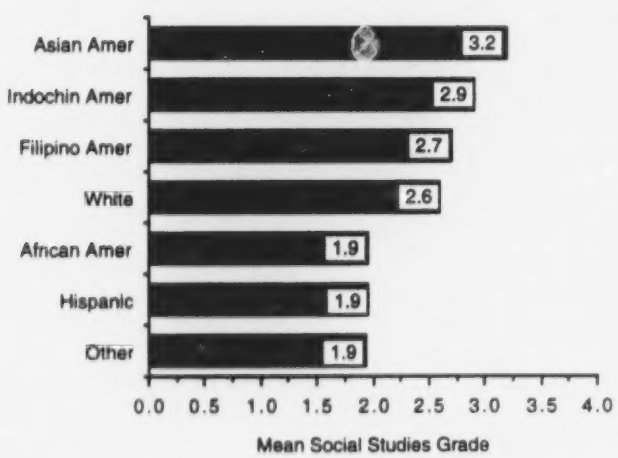

Figure 13. Mean Social Studies Grade, First Semester 1993-94: Grade 9

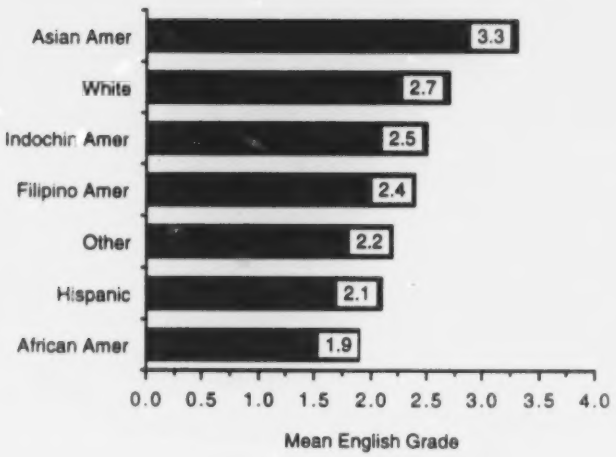

Figure 14. Mean English Grade, First Semester 1993-94: Grade 11

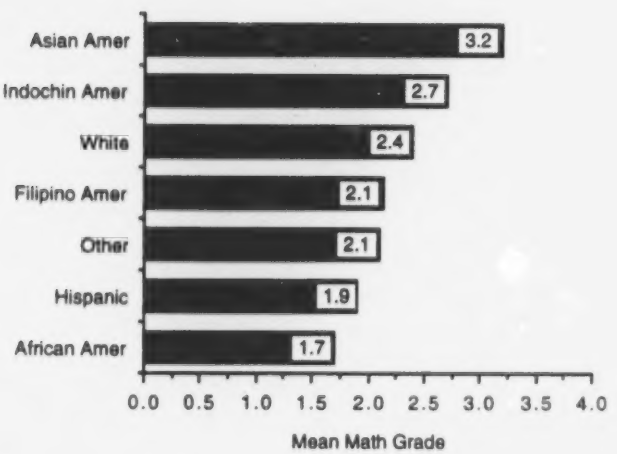

Figure 15. Mean Math Grade, First Semester 1993-94: Grade 11

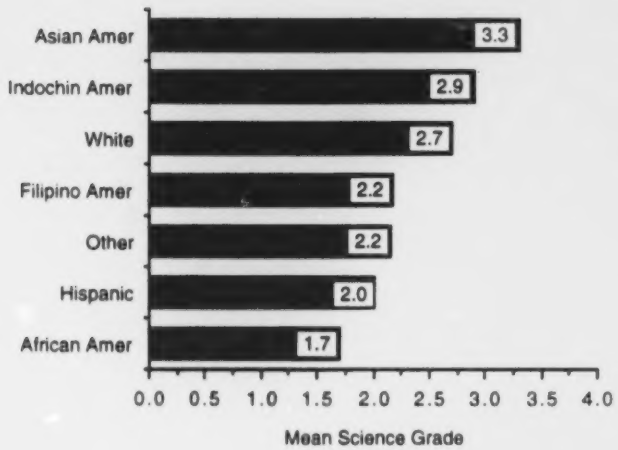

Figure 16. Mean Science Grade, First Semester 1993-94: Grade 11

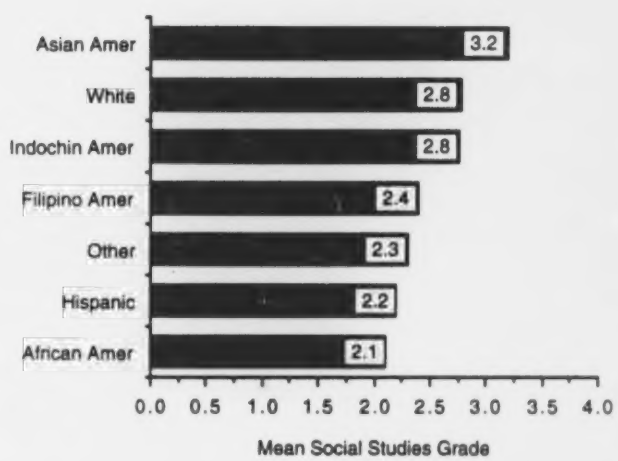

Figure 17. Mean Social Studies Grade, First Semester 1993-94: Grade 11

Tables 23-25 provide (1) the percentage of students who earned a course mark of "C" or above, and (2) the percentage of students who failed the core subject. The data are disaggreated by ethnicity, gender, language proficiency, and enrollment in special programs. The subject in which the greatest percentage of students failed to earn a passing grade was math at grades 7 and 11, and social studies at grade 9.

When examining course grade data by ethnicity, gender, language proficiency, and special program designation (special education, Chapter 1, and gifted certification), the analysis revealed that the highest percentage of students who *earned a "C" or above in core curricula areas* was among those who were Asian American, certified for gifted education, not identified as Chapter 1, female, not enrolled in special education, and English proficient. The analysis revealed that the highest percentage of students who *failed their core curricula course work* was among those who were enrolled in special education; either African American, Hispanic, or "Other", depending on subject area; male; identified as Chapter 1; not certified for gifted education; and English learners.

Table 23
COURSE PERFORMANCE IN CORE CURRICULA: (First Semester, 1993-94)
Grade 7

Ethnicity	English			Math			Science			Social Studies		
	n	C or above (%)	Failed course (%)	n	C or above (%)	Failed course (%)	n	C or above (%)	Failed course (%)	n	C or above (%)	Failed course (%)
All Students	**2727**	**80.6**	**5.4**	**2697**	**72.8**	**11.2**	**1437**	**78.8**	**7.2**	**2626**	**79.4**	**7.0**
African Amer	420	70.0	6.4	416	58.9	17.8	231	65.8	13.0	409	70.9	8.8
Asian Amer	40	95.0	—	37	94.6	2.7	14	100.0	—	37	94.6	2.7
Filipino Amer	282	91.5	1.4	282	83.7	6.7	154	92.2	2.6	281	88.6	3.2
Hispanic	849	73.9	8.4	835	61.6	15.6	421	70.8	7.8	809	70.7	10.5
Indochin Am	347	93.1	1.4	341	90.0	3.5	234	93.2	0.4	307	92.5	1.6
White	725	83.3	5.4	723	79.7	8.9	358	80.7	9.8	721	83.9	6.2
Other	64	82.8	—	63	79.4	4.8	25	76.0	4.0	62	80.6	6.5
Females	**1355**	**87.5**	**2.7**	**1328**	**79.7**	**8.1**	**712**	**85.3**	**3.5**	**1302**	**85.9**	**4.5**
Males	**1372**	**73.7**	**8.0**	**1369**	**66.1**	**14.3**	**725**	**72.4**	**10.9**	**1324**	**73.0**	**9.5**
Special Educ	206	63.6	9.2	202	47.5	24.8	119	61.3	19.3	209	63.2	18.7
Regular Educ	2521	82.0	5.0	2495	74.8	10.1	1318	80.3	6.1	2417	80.8	6.0
Chapter 1	**1567**	**75.9**	**7.0**	**1554**	**65.6**	**14.9**	**858**	**74.4**	**8.2**	**1484**	**73.4**	**8.8**
Non-Chapt 1	**1160**	**86.9**	**3.1**	**1143**	**82.5**	**6.3**	**579**	**85.3**	**5.9**	**1142**	**87.2**	**4.7**
Eng Learner	832	80.3	6.3	823	70.8	11.7	439	79.5	4.1	742	79.0	6.3
Eng Proficient	1895	80.7	5.0	1874	73.6	11.0	998	78.5	8.6	1884	79.6	7.3
Gifted Educ	**670**	**93.1**	**1.8**	**637**	**91.4**	**2.7**	**347**	**91.6**	**3.2**	**637**	**90.0**	**2.5**
Regular Educ	**2057**	**76.5**	**6.5**	**2060**	**67.0**	**13.9**	**1090**	**74.7**	**8.5**	**1989**	**76.0**	**8.5**

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Table 24
COURSE PERFORMANCE IN CORE CURRICULA: (First Semester, 1993-94)
Grade 9

Ethnicity	English			Math			Science			Social Studies		
	n	C or above (%)	Failed course (%)	n	C or above (%)	Failed course (%)	n	C or above (%)	Failed course (%)	n	C or above (%)	Failed course (%)
All Students	**3030**	**71.9**	**10.6**	**3017**	**63.4**	**15.7**	**1074**	**72.8**	**10.5**	**2611**	**74.1**	**11.7**
African Amer	601	61.1	13.0	602	54.7	22.4	186	53.8	16.7	514	62.5	19.3
Asian Amer	40	95.0	—	40	85.0	2.5	18	94.4	—	34	94.1	5.9
Filipino Amer	404	83.2	5.7	404	74.3	8.9	144	84.7	4.9	365	86.3	4.9
Hispanic	877	60.3	16.8	864	49.5	24.1	293	59.0	17.4	753	64.7	16.6
Indochin Am	330	83.6	7.9	320	80.6	5.0	150	89.3	5.3	270	86.3	6.7
White	727	82.3	5.4	736	73.2	8.6	270	85.6	4.8	628	82.2	5.6
Other	51	68.6	13.7	51	51.0	27.5	13	38.5	23.1	47	68.1	17.0
Females	**1430**	**79.5**	**7.1**	**1416**	**67.2**	**13.0**	**510**	**77.1**	**9.2**	**1229**	**79.8**	**9.0**
Males	**1600**	**65.1**	**13.7**	**1601**	**60.1**	**18.1**	**564**	**69.0**	**11.7**	**1382**	**69.1**	**14.1**
Special Educ	152	47.4	21.7	183	42.1	32.8	54	48.1	20.4	152	46.1	30.9
Regular Educ	2878	73.2	10.0	2834	64.8	14.6	1020	74.1	10.0	2459	75.9	10.5
Chapter 1	**1664**	**63.1**	**15.1**	**1638**	**54.0**	**21.4**	**559**	**63.3**	**15.0**	**1456**	**65.9**	**16.4**
Non Chapt 1	**1366**	**82.7**	**5.1**	**1379**	**74.7**	**8.8**	**515**	**83.1**	**5.6**	**1155**	**84.5**	**5.7**
Eng Learner	823	67.3	13.9	788	58.5	19.4	288	68.8	13.9	665	71.6	13.4
Eng Proficient	2207	73.6	9.3	2229	65.2	14.4	786	74.3	9.3	1946	75.0	11.1
Gifted Educ	**231**	**92.2**	**1.7**	**427**	**90.9**	**5.0**	**498**	**89.2**	**3.2**	**497**	**83.9**	**5.0**
Regular Educ	**843**	**67.5**	**12.9**	**2184**	**70.9**	**17.8**	**2532**	**68.5**	**12.0**	**2520**	**59.4**	**17.8**

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Table 25
COURSE PERFORMANCE IN CORE CURRICULA: (First Semester, 1993-94)
Grade 11

Ethnicity	English			Math			Science			Social Studies		
	n	C or above (%)	Failed course (%)	n	C or above (%)	Failed course (%)	n	C or above (%)	Failed course (%)	n	C or above (%)	Failed course (%)
All Students	**3013**	**75.6**	**8.4**	**2900**	**68.0**	**13.9**	**2385**	**72.5**	**11.1**	**2894**	**78.9**	**7.2**
African Amer	562	64.6	13.3	536	54.9	20.9	448	56.7	16.7	528	71.2	12.7
Asian Amer	73	95.9	1.4	64	87.5	—	68	92.6	2.9	73	93.2	1.4
Filipino Amer	324	77.5	7.7	319	65.8	11.9	267	67.0	15.7	321	80.1	6.5
Hispanic	850	70.2	9.6	824	61.2	19.7	636	65.4	14.6	796	71.6	8.4
Indochin Am	312	82.1	9.6	290	80.7	7.2	237	87.3	4.2	287	84.0	6.3
White	844	83.6	4.0	818	77.6	7.7	690	84.3	5.8	840	87.6	3.5
Other	48	70.8	14.6	49	79.6	12.2	39	69.2	5.1	49	71.4	8.2
Females	**1493**	**80.8**	**6.0**	**1431**	**71.2**	**11.9**	**1177**	**76.8**	**8.8**	**1414**	**82.2**	**5.5**
Males	**1520**	**70.5**	**10.8**	**1469**	**64.9**	**15.7**	**1208**	**68.2**	**13.3**	**1480**	**75.7**	**8.7**
Special Educ	95	60.0	11.6	128	50.8	23.4	88	54.5	26.1	123	51.2	24.4
Regular Educ	2918	76.1	8.3	2772	68.8	13.4	2297	73.1	10.5	2771	80.1	6.4
Chapter 1	**1517**	**66.5**	**11.9**	**1459**	**58.9**	**19.5**	**1198**	**63.2**	**15.3**	**1427**	**69.7**	**10.8**
Non Chapt 1	**1496**	**84.8**	**4.9**	**1441**	**77.2**	**8.2**	**1187**	**81.8**	**6.8**	**1467**	**87.8**	**3.6**
Eng Learner	744	73.0	10.3	694	66.0	16.9	549	71.8	12.2	655	75.1	8.2
Eng Proficient	2269	76.4	7.8	2206	68.6	12.9	1836	72.7	10.7	2239	80.0	6.8
Gifted Educ	**452**	**90.0**	**2.9**	**416**	**82.9**	**5.3**	**389**	**88.7**	**3.3**	**447**	**94.2**	**2.0**
Regular Educ	**2561**	**72.9**	**9.4**	**2484**	**65.5**	**15.3**	**1996**	**69.3**	**12.6**	**2447**	**76.1**	**8.1**

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Tables 26-28 provide the courses which students failed to pass within each subject area. At all grade levels, failed courses occurred most frequently in mathematics. The failure rate was highest at grade 9 in all four subject areas.

Table 26
FAILED COURSEWORK, First Semester 1993-94
Grade 7

Subject	Course	n	Percent of enrollment in subject area
English	English 7	122	4.8
	Beginning ESL 7	2	
	Intermediate ESL 7	10	
	Advanced ESL 7	12	
Math	Math 7	168	10.0
	Advanced Math Jr High	135	
Science	Marine Science	19	3.4
	Explorer Science 7	42	
	Science 7	25	
	Science in Action	18	
Social Studies	Social Studies 7	185	6.1

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Table 27
FAILED COURSEWORK, First Semester 1993-94
Grade 9

Subject	Course	n	Percent of enrollment in subject area
English	English Language Arts *	3	
	English 1-2	253	
	English 3-4	14	
	ESL 1	14	9.9
	ESL 3	9	
	ESL 5	23	
	ESL Newcomer 9-12	3	
	Reading Development 1 *	1	
Math	Math *	3	
	Math 8	1	
	Newcomer Math 9-12 *	1	
	Pre-Algebra 1-2	174	
	Math A 1-2	79	14.6
	Math B 1-2	2	
	Algebra 1-2	198	
	Advanced Math 3	12	
	Geometry 1-2	1	
	Intermediate Algebra 1-2	2	
Science	Science *	1	
	Life/Physical Science 8	1	
	Advanced Science 3	5	
	Life Science 1-2	4	
	Biology 1	23	3.5
	Advanced Biology 1	1	
	Physical Science 1-2	71	
	Physics 1	6	
	Environmental Science	1	
Social Studies	World History/Geography/Economics 1	258	
	Advanced World History 1	13	9.4
	Global Political and Economic Decisions 1	34	

* Considered non-core course

Table 28
FAILED COURSEWORK, First Semester 1993-94
Grade 11

Subject	Course	n	Percent of enrollment in subject area
English	English Language Arts *	4	
	English 1-2	6	
	English 3-4	9	
	ESL 3	2	
	ESL 5	10	
	American Literature 1-2	183	7.7
	Advanced American Literature 1	18	
	Contemporary Voices in Literature 1	4	
	World Literature 1-2	5	
	IB Literature of the Americas 1	9	
	IB English 1	1	
	Writers Workshop 1	1	
Math	Math *	1	
	Pre-Algebra 1-2	10	
	Math A 1-2	20	
	Math B 1-2	36	
	Algebra 1-2	80	
	Math for College Entrance 1	1	12.2
	Geometry 1-2	145	
	Intermediate Algebra 1-2	87	
	Trigonometry and Advanced Algebra 1	9	
	Advanced Math 5	1	
	Advanced Math 7	12	
Science	Life Science 1	4	
	Biology 1	53	
	Advanced Biology 1	2	
	Physiology 1	2	
	AP Biology	1	
	Chemistry 1-2	83	
	Advanced Chemistry 1	5	8.0
	AP Chemistry 1	1	
	Physical Science 1-2	38	
	Physics 1	67	
	Advanced Physics 1	1	
	AP Physics	1	
	Marine Science 1	4	
	Environmental Science 1	2	
Social Studies	World History/Geography/Economics 1	7	
	IB Contemporary World History	1	
	U.S. History 1-2	182	
	Advanced U.S. History 1	3	
	AP American History 1	2	6.3
	IB History of the Americas 1	1	
	Government 1	6	
	Economics 1	4	
	IB Economics/American Government 1	1	

* Considered non-core course

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Figures 18-29 provide the gender of students, by ethnicity, who failed to pass a core subject course. The data revealed that male students were much more likely to fail a core subject course than were females. This tendency persisted across all ethnic groups, subject areas, and grade levels.

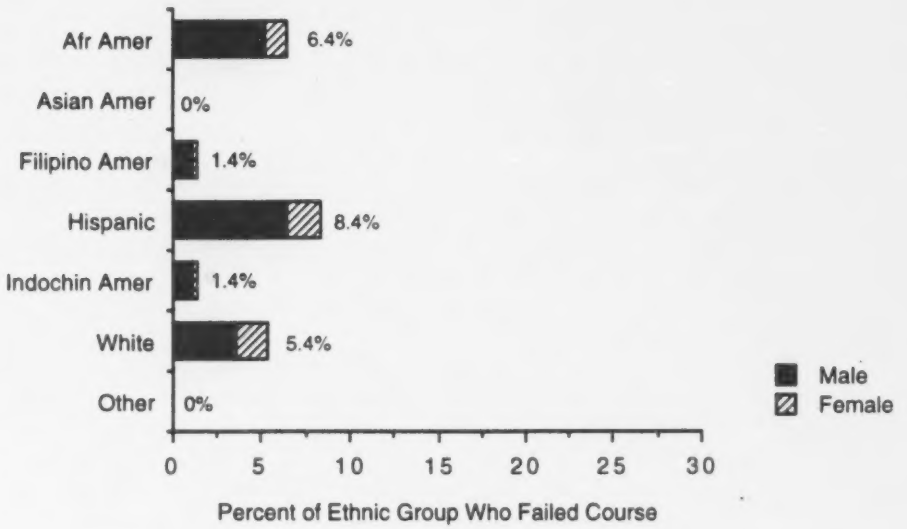

Figure 18. Percent of Ethnic Group Who Failed English Course, First Semester 1993-94, by Gender: Grade 7

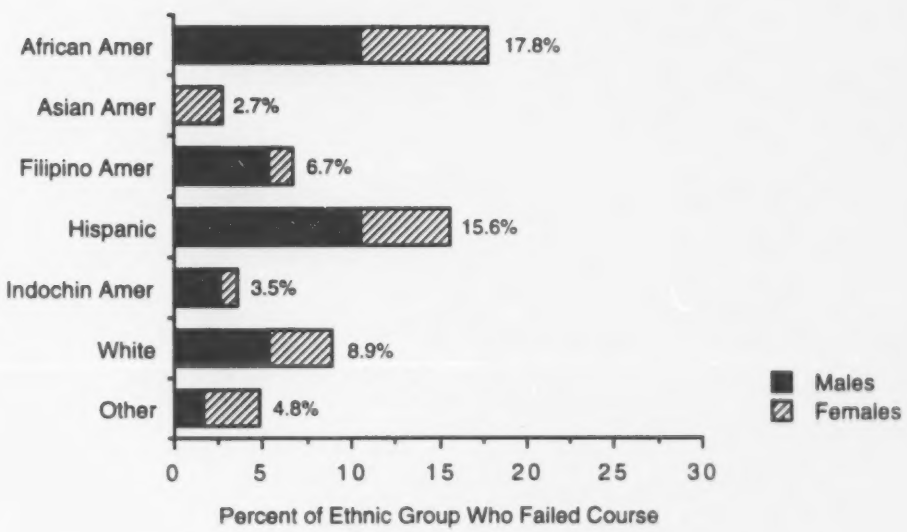

Figure 19. Percent of Ethnic Group Who Failed Math Course, First Semester, 1993-94, by Gender: Grade 7

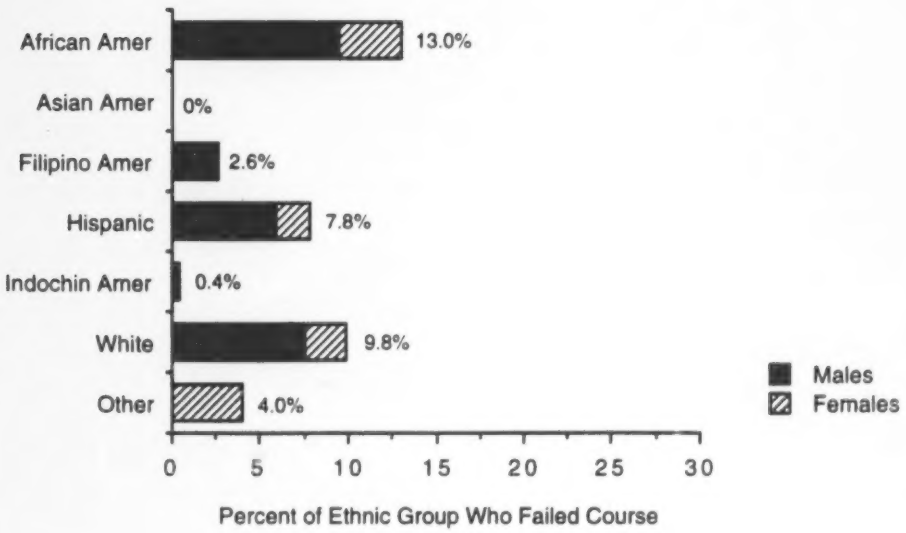

Figure 20. Percent of Ethnic Group Who Failed Science Course, First Semester, 1993-94, by Gender: Grade 7

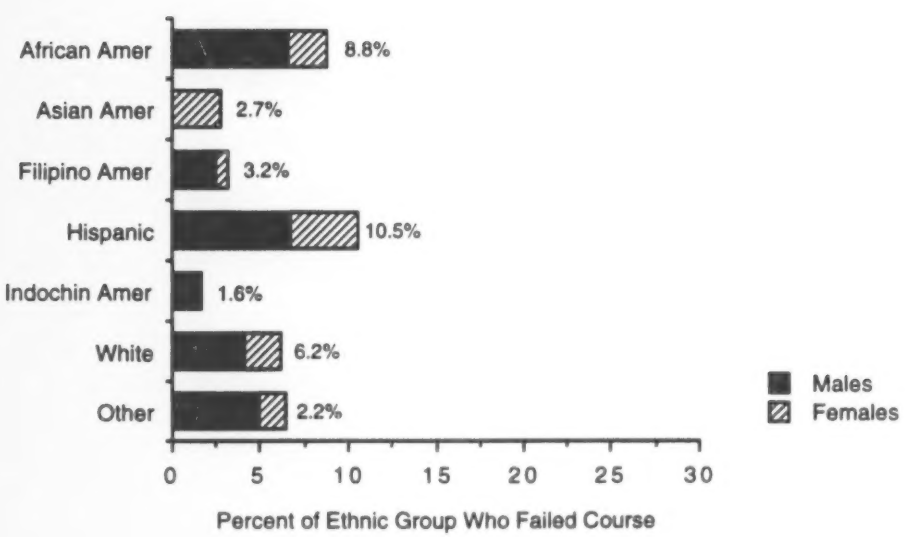

Figure 21. Percent of Ethnic Group Who Failed Social Studies Course, First Semester, 1993-94, by Gender: Grade 7

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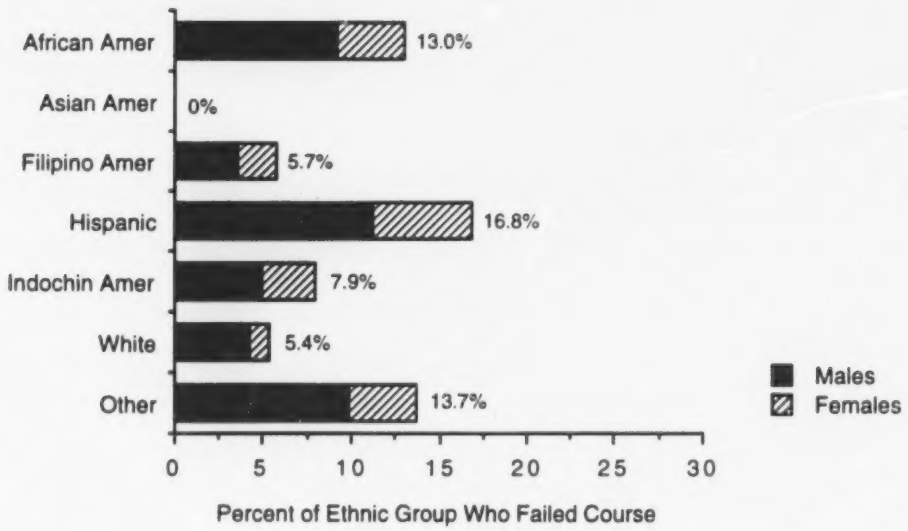

Figure 22. Percent of Ethnic Group Who Failed English Course, First Semester, 1993-94, by Gender: Grade 9

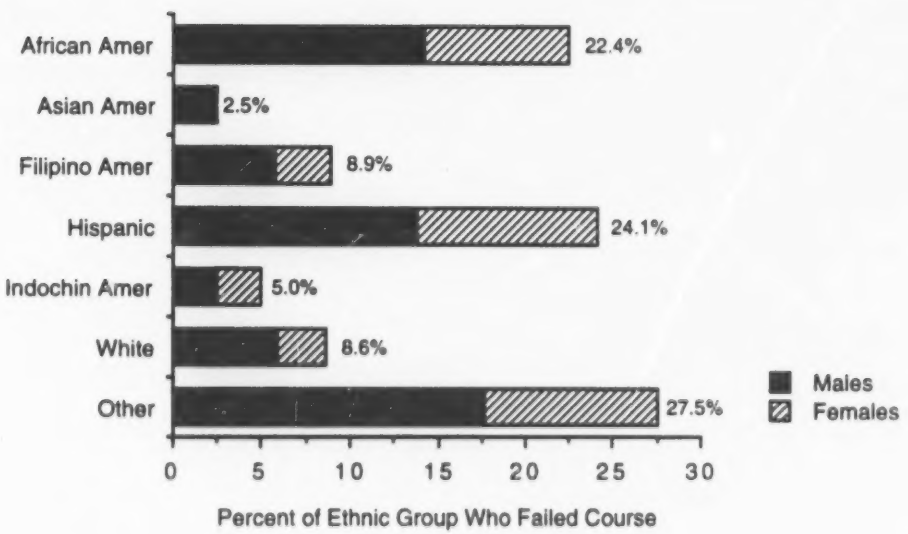

Figure 23. Percent of Ethnic Group Who Failed Math Course, First Semester, 1993-94, by Gender: Grade 9

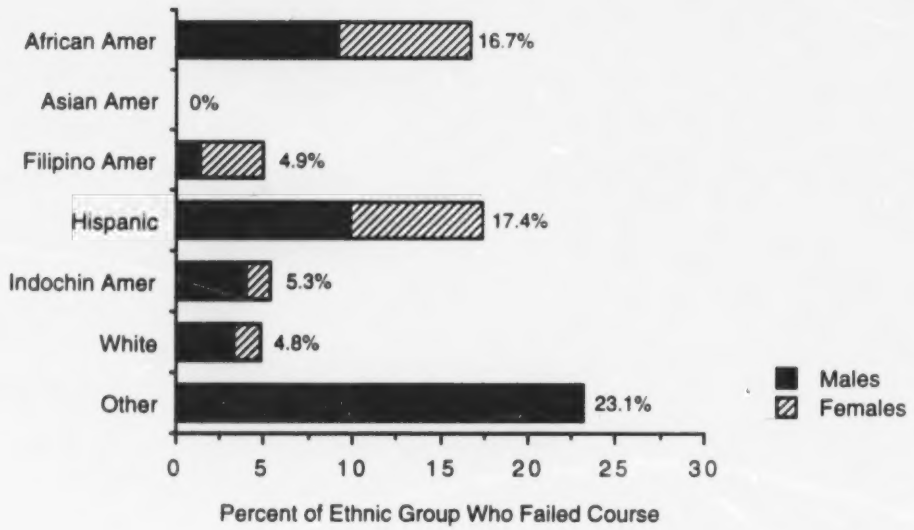

Figure 24. Percent of Ethnic Group Who Failed Science Course, First Semester, 1993-94, by Gender: Grade 9

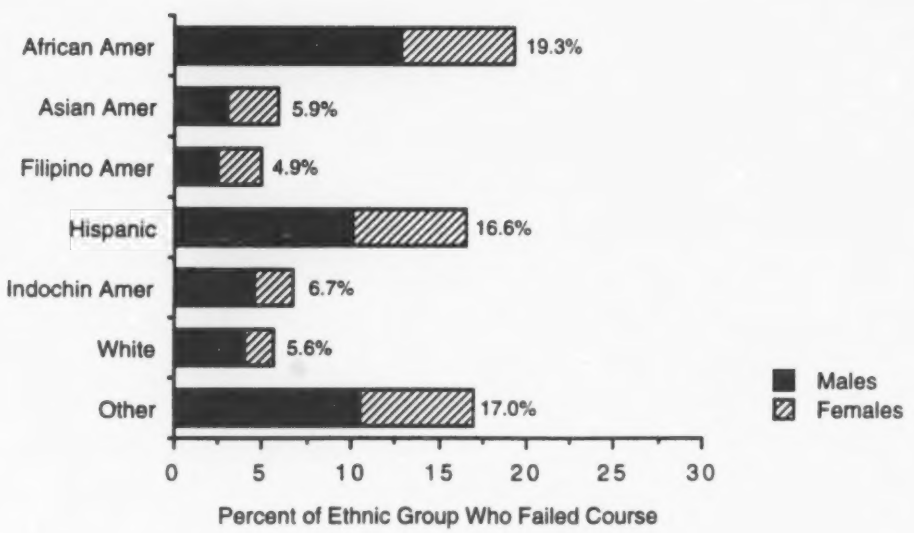

Figure 25. Percent of Ethnic Group Who Failed Social Studies Course, First Semester, 1993-94, by Gender: Grade 9

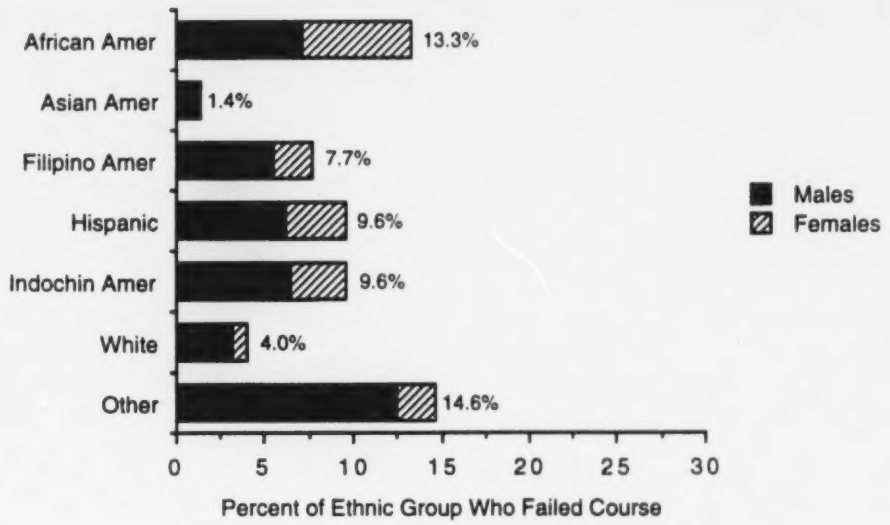

Figure 26. Percent of Ethnic Group Who Failed English Course, First Semester, 1993-94, by Gender: Grade 11

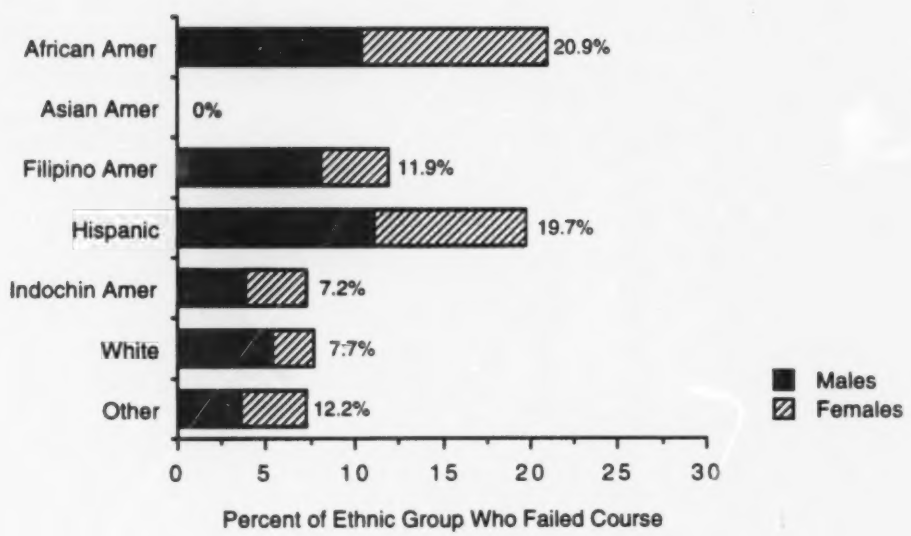

Figure 27. Percent of Ethnic Group Who Failed Math Course, First Semester, 1993-94, by Gender: Grade 11

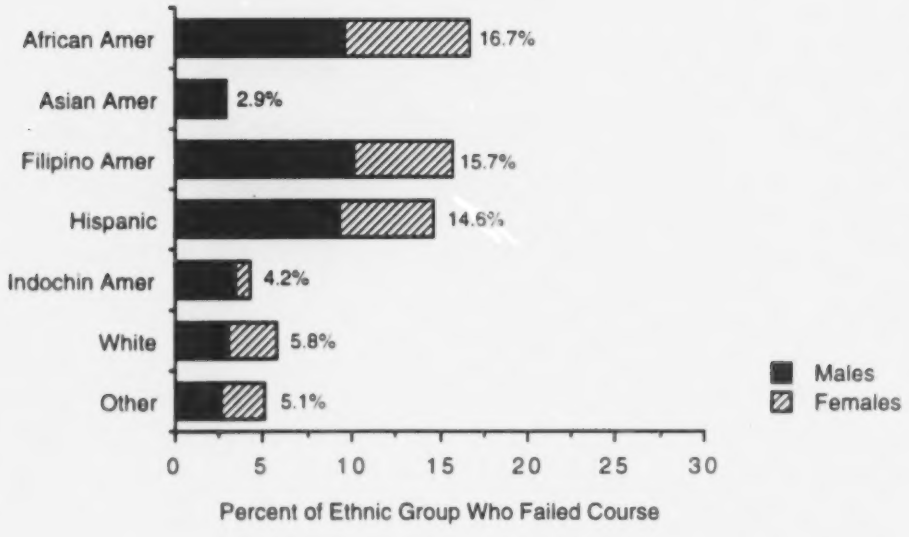

Figure 28. Percent of Ethnic Group Who Failed Science Course, First Semester, 1993-94, by Gender: Grade 11

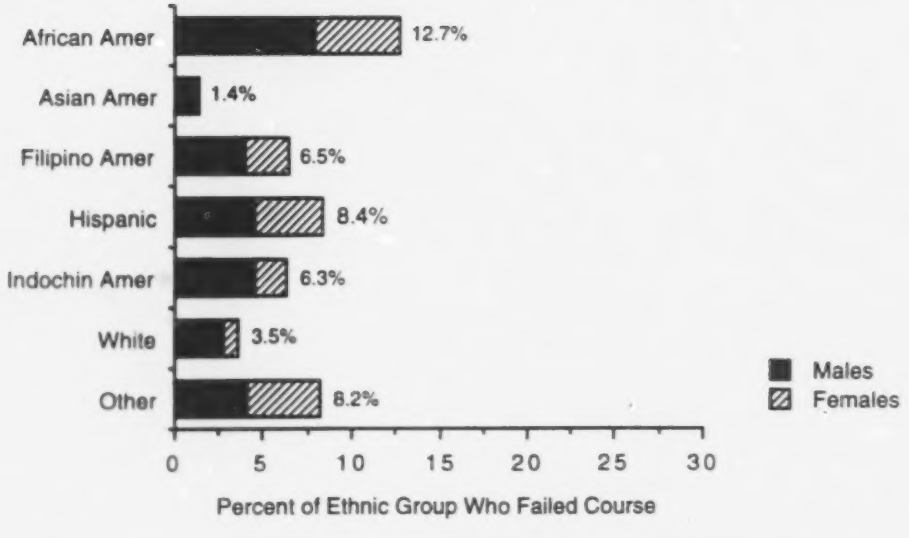

Figure 29. Percent of Ethnic Group Who Failed Social Studies Course, First Semester, 1993-94, by Gender: Grade 11

A broad majority of students in grades 7, 9, and 11 (roughly 86 percent) received either an "Excellent," "Good," or "Satisfactory" citizenship mark in their core course work. In each core subject course, with the exception of math, a majority of students who failed to earn a passing grade also received a "Needs Improvement" or "Unsatisfactory" citizenship mark (61.3 percent of those who failed English, 51.2 percent failing science, 61.1 percent failing social studies, and 46.7 percent failing math).

Characteristics which significantly increased the likelihood of receiving a "Needs Improvement" of "Unsatisfactory" citizenship mark were male gender, participation in special education, Chapter 1 identification, and lack of certification for gifted education; language level had no apparent impact on citizenship marks. Additionally, students in grade 9 were more likely to receive a "Needs Improvement" of "Unsatisfactory" citizenship mark than students in grades 7 or 11.

Figure 30 provides the percent of students in major ethnic groups who received a "Needs Improvement" of "Unsatisfactory" citizenship mark. The data showed that African American students were most likely to receive such a mark, independent of course subject, followed by Hispanics, students in the "Other" ethnic category, White students, Filipino Americans, Indochinese Americans, and Asian Americans.

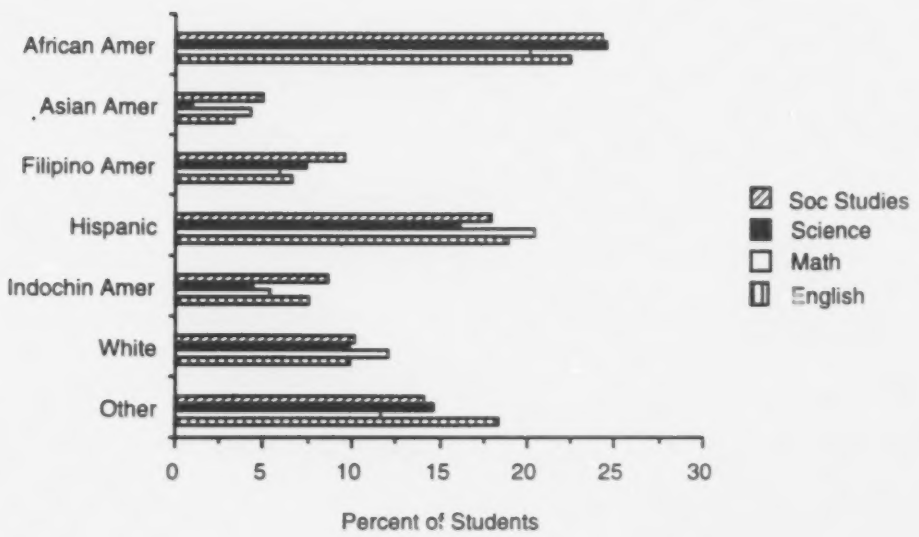

Figure 30. Percent of Students Who Received a "Needs Improvement" or "Unsatisfactory" Citizenship Mark, First Semester, 1993-94: Grades 7, 9, and 11

The analysis of student achievement data also examined ASAT results for English-proficient students (i.e., either native English speakers or non-native speakers who have been reclassified as fluent in English). The analysis of ASAT data focused on grade 7, the only grade level other than grade 5 at which ASAT testing is mandatory at all district sites. Figure 31 provides the percentile ranks by ethnicity. The data showed that, in all three subject areas, Asian Americans achieved the highest average percentile rank, followed by Whites, Filipino Americans and Indochinese Americans, students in the "Other" ethnic category, Hispanics, and African Americans.

Separate analyses indicated that students with certification for gifted education significantly outperformed other students (p=.0000), while special education students were significantly outperformed by other students (p=.0000). Female students attained a significantly higher mean percentile rank than their male counterparts in language (p=.0000) and reading (p=.0000); females also attained a slightly higher mean rank in math.

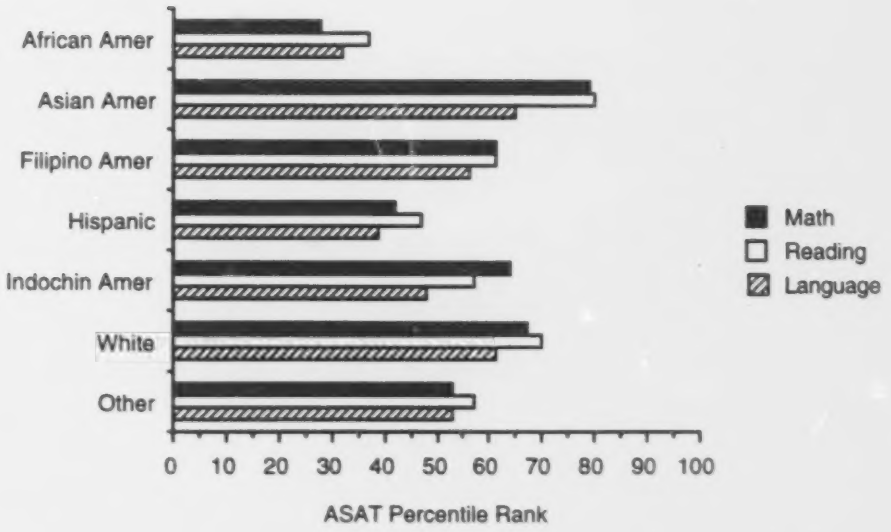

Figure 31. 1994 ASAT Mean Percentile Rank in Total Language, Total Reading, and Total Math by Ethnicity: Grade 7

Figure 32 provides the mean percentile rank of Chapter 1 students who took the ASAT at the designated sites. Results for students in grades 7, 9, and 11 are included here, since ASAT testing is mandatory for Chapter 1 students at all grade levels. In all subject areas and at all three grade levels, students identified as Chapter 1 were significantly outperformed by other students (p=.0000).

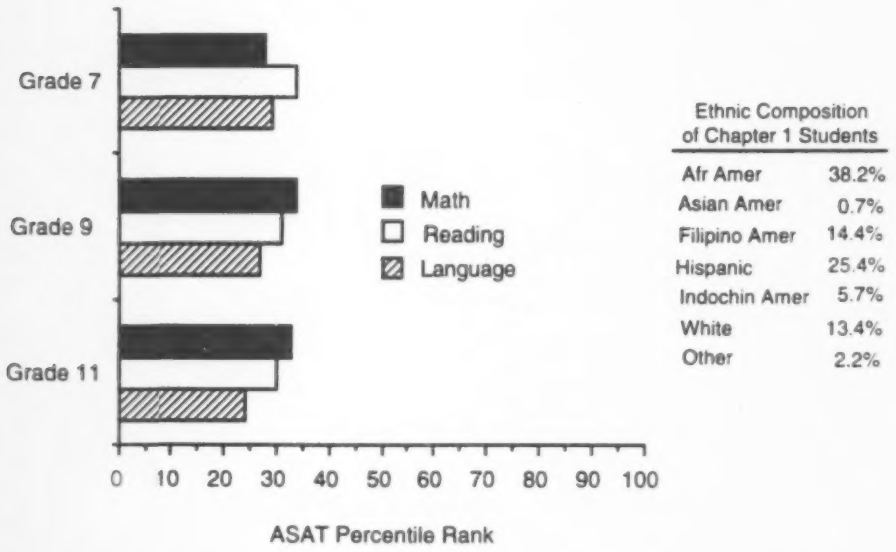

Figure 32. 1994 ASAT Mean Percentile Rank in Total Language, Total Reading, and Total Math: Chapter 1 Students in Grades 7, 9, and 11

College Entrance Requirements

Under Expectation 6, the district *Plan to Improve Student Achievement* identified a number of indicators that reflect student readiness for college: UC a-f course completion at grade 12, SAT participation rates and scores, cumulative grade point averages at upper grade levels, and Advanced Placement (AP) course enrollment and credit. These indicators also provide valuable feedback about how students have performed in core curriculum course work.

Drawing on the *16 Expectations Performance Indicators: District Wide Year to Year Comparison Report* (February 1995), Table 29 provides indicators that reflect student preparedness for college, disaggregated by ethnicity. The data revealed that, where comparisons with the previous year were available, most student groups showed modest progress. When compared with other major ethnic categories, a significantly smaller percentage of African American and Hispanics students (1) completed UC a-f course work, (2) achieved a cumulative GPA of 2.0 or higher, and (3) enrolled in AP course work. However, African American students demonstrated a dramatic 9 percent gain among those attaining a 2.0 cumulative GPA or higher. Additionally, the percent of Hispanic students with AP exam scores of "3" or higher was above the district average and roughly equal to that for White students. Asian American students also enjoyed an exceptional gain of 12 percent among those completing UC a-f course work.

Table 29
STUDENT PROGRESS ON COLLEGE ENTRANCE REQUIREMENTS*

Indicator	District	African American	Asian American	Filipino American	Hispanic	Indochin American	White
UC a-f Course Work (1992-93)							
Percent completing coursework	**38.3**	23.8	54.7	50.6	19.8	42.5	47.7
Change in percent from previous year	**+0.5**	+0.8	+12.3	+1.3	-1.8	+2.0	-0.8
SAT Scores (1993-94)					(Mexican Americans only)		
Mean Verbal Score	**410**	347	374	**	368	**	474
Mean Math Score	**470**	387	470	**	417	**	522
Cum GPA, without PE (1993-94)							
Percent 2.0 or higher	**87.1**	79.3	93.8	90.0	78.9	92.4	92.5
Change in percent from previous year	**+3.2**	+9.0	+0.1	+2.8	+2.8	+1.2	+2.8
AP Course Work (1993-94)							
Percent enrolled in AP course work	**16.8**	9.3	41.2	15.5	11.9	14.9	23.0
Change in percent from previous year	**+0.3**	+0.9	+3.2	+0.7	+0.4	+0.7	0.0
Percent with AP exam score of "3" or higher (grades 10-12)	**61.7**	34.3	48.1	*	69.0	*	69.7

* Source: *16 Expectations Performance Indicators: District Wide Year to Year Comparison Report* (February 1995)

** Data were not available.

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SUMMARY OF FINDINGS: PART I

Before reviewing the summary of findings from Part I, the reader is reminded to note an important distinction in ethnic categories used in the two separate analyses:

- Based on the methodological approach established by the Equity in Student Placement Practices Oversight Committee, ethnic categories reflected in the *longitudinal cohort analysis* were comprised of African American, Hispanic, White, and all "Other" students.

- The *analysis of core course enrollment and achievement data for students in grades 7, 9, and 11 during Semester 1, 1993-94,* used an ethnic categorization with greater specificity to reflect African American, Asian American, Filipino American, Hispanic, Indochinese American, White, and all "Other" students.

The results of a longitudinal cohort analysis of the enrollment and achievement patterns of the class of 1994 suggest that:

1. The percent of students who dropped out of school during the course of the study was highest among students in Group 1 (i.e., those who were enrolled as seventh graders in Math 7, i.e. the "regular math" sequence), male students, and Hispanics (15.8 percent), followed by White students (14.1 percent), African Americans (13.9 percent), and students in the "Other" ethnic category (11.1 percent).

2. The percent of students who were retained at grade level during the study was highest among students in Group 1, males, and Hispanic (11.3 percent) and African American (8.3 percent) students.

3. A decided majority of Group 1 students (97 percent) remained in the "regular" math sequence throughout their secondary-level course work. Less than half (45 percent) of Group 2 students (i.e., those who were enrolled as seventh graders in Advanced Math Junior High) remained in the "advanced" math sequence.

4. By grade 12, Hispanic students in both Group 1 and Group 2 were overrepresented among those still enrolled in math course work intended for earlier grade levels. African Americans in Group 1 were also overrepresented in these courses.

5. Average math course marks declined between grade 7 and grade 12, but to a greater degree within Group 1 than Group 2.

6. Because students in the White and "Other" ethnic categories had higher overall marks at grade 7 but experienced a greater decline by grade 12, the gap between the average course marks of these students and the average marks of African American and Hispanic students became smaller.

7. Students who began in the "advanced" math sequence (Group 2) earned course marks in grade 12 (first semester) that were roughly one-half grade higher, on average, than those earned by Group 1 students.

8. White students and students in the "Other" ethnicity category earned higher course marks in grade 12 (first semester), on average, than did their African American and Hispanic classmates.

9. Students in the "Other" ethnicity category, earned the highest overall citizenship grades at grade 12 (first semester), followed by White, Hispanic, and African American students.

10. Of the 2,334 cohort students whose grade 12 math course enrollment and grades were included in the analysis *(only roughly 35 percent of the original cohort of 6,700)*, 92.4 percent graduated at the conclusion of the 1993-94 school year; 89.4 percent of these graduates represent Group 1 students and 96.4 percent represent Group 2 students). When all "still active" students were included in the graduation data, regardless of whether or not they were enrolled in a math course during the 1993-94 school year, the data indicated that 91.5 percent of the cohort had graduated (88.1 percent of Group 1 students and 96 percent of Group 2 students).

11. Disproportionately represented among the 168 students who had not graduated because they had not completed requirements were Hispanic students and students in Group 1.

The analysis of core course enrollment and achievement data for students in grades 7, 9, and 11 during Semester 1, 1993-94, suggests that:

1. Almost all students were enrolled in courses identified as part of the core curriculum in each subject area; non-core course enrollment largely represented special language needs.

2. In general, African American and Hispanic students were overrepresented in courses intended for earlier grade levels. Asian American and White students were overrepresented in AP and other advanced course work, often joined by Filipino Americans and Indochinese Americans, depending on subject area.

3. In general, special education students, students identified as Chapter 1, and English Language Learners were overrepresented in less advanced course work. Students who were certified for gifted education were overrepresented in AP and other advanced course work.

4. Asian American students earned the highest average course marks in all four core course subjects and at all three grade levels. Depending on the subject area, African Americans, Hispanics, and students in the "Other" ethnic category earned the lowest average course marks, with the exception of grade 7 where students in the "Other" ethnic category earned slightly higher marks overall than did White students.

5. Females, on average, significantly outperformed their male classmates in all four core course subjects and at all three grade levels.

6. When compared with other students, special education and Chapter 1 students earned significantly lower course marks. The average marks of students with gifted certification were significantly higher than other students.

7. The highest percentage of students who *earned a "C" or above* in core curriculum areas were among those who were Asian American, certified for gifted education, not Chapter 1, female, not enrolled in special education, and English proficient.

8. The highest percentage of students who *failed* their core subject course were among those who were enrolled in special education, African American, Chapter 1, male, English Language Learners, not certified for gifted education, and in grade 9.

9. Students failed to earn a passing grade most frequently in mathematics; the failure rate was highest at grade 9 in all four core curriculum areas.

10. Male students were much more likely to fail a core curriculum course than were females, regardless of grade level, curriculum area, or ethnicity.

11. African American students were most likely to receive either a "Needs Improvement" or "Unsatisfactory" citizenship mark, independent of course subject, followed by Hispanics, students in the "Other" ethnic category, White students, Filipino Americans, Indochinese Americans, and Asian Americans. Students in grade 9 were more likely to receive such a mark than were students in grades 7 or 11. Additionally, with the exception of math, a majority of students who failed to earn a passing grade also received either a "Needs Improvement" or "Unsatisfactory" citizenship mark.

12. Female students in grade 7 attained a *significantly* higher mean ASAT percentile rank than did their male counterparts in language and reading; females also attained a slightly

higher mean rank in math. In addition, grade 7 students with certification for gifted education *significantly* outperformed other students.

13. In all three ASAT subject areas and at all three grade levels, students identified as Chapter 1 were *significantly* outperformed by other students.

Performance indicators that reflect college readiness among upper-grade level students showed that:

1. When compared with other student groups, a significantly smaller percentage of African American and Hispanic students completed UC a-f course work, enrolled in AP course work, or achieved a cumulative GPA of 2.0 or higher.

2. African American students demonstrated a nine percent gain among those attaining a 2.0 cumulative grade point average or higher, when compared with the previous year.

3. The percent of Hispanic students with AP exam scores of "3" or higher was above the district average and roughly equal to that for White students.

4. Asian American students demonstrated a gain of 12 percent among those completing UC a-f course work, when compared with the previous year.

FINDINGS: PART II

Analysis of Interview and Survey Data

As mentioned in the Methodology section, the analysis of interview data was based on information provided by all administrators at the 24 study sites, and by 13 of 14 counselors at the 14 secondary-level study sites. The response rate for survey data was 25.4 percent for teachers (n=137), and 15.7 percent for students (n=377) and parents (n=377). (The interview and survey instruments are provided in Appendices A-F. Ethnic and student grade level data for the student and parent respondents were provided in Tables A and B and in Figures A and B .

It is useful to note when reviewing the findings that, while the core curriculum policy focuses on the four primary content areas of English, mathematics, science, and social studies, district teachers and administrators who were either interviewed or surveyed for this study also identified Spanish language arts, ELEPS, health, physical education, and fine arts as part of their more broadly defined "core" curriculum.

Support Services

Range of Support Services. A primary concern that emerged from two previous reviews of the implementation of the core curriculum policy was the provision of effective support services to assist students in core curriculum subjects. Information provided by interviews with principals and secondary-level counselors, and by surveys completed by secondary-level teachers and students, confirmed that sites offer a wide range of programs to students who are struggling in their core course work. Most programs are offered during the school day, but many sites also provide support services before or after school, as well as on weekends (e.g., Saturday School).

Support services that were identified in interview and survey data were aggregated for the purpose of analysis and display into five broad categories of focus: (1) skills reinforcement or enrichment, (2) motivation and leadership, (3) alternative discipline, (4) alternative education, and (5) "other." Table 30 provides a tabulation of specific programs that were identified by respondents. At the elementary level, administrators reported an average of five skills reinforcement or enrichment programs, two-to-three programs to promote motivation and leadership, and one alternative discipline program. Secondary-level site administrators and counselors cited a broader variety of services, including an average of seven programs dealing with skills reinforcement or enrichment, five motivation- and leadership-oriented programs, and one or two programs related to either alternative discipline or alternative education.

Table 30
SERVICES TO SUPPORT CORE CURRICULUM COURSE WORK

Broad Focus	Service Reference	
Skills Reinforcement or Enrichment	Academic APT	Maintenance and Motivation
	Advisory period/At risk	MESA
	After-school math	Newcomer (sec. lang) assistance
	AVID	Off-track math/reading
	Basic skills tutorial	Opportunity program/High risk
	Chapter 1 reading/math	Peer/cross-age tutoring
	Chapter 2 reading/math	Prep period assistance
	CPIE	Reading assistance
	Educational Talent Search	Rotating math/reading tutors
	EISS	Saturday School
	EXCEL	SAY
	HOTS	SOI
	MAGIC	Tutoring partnerships
Motivation or Leadership	Adopt a Kid	Latina advocacy
	African American Male advocacy	Preparation to Reach College through Excellence & Perseverence
	BABES	SD Urban League/Collaborative
	Black Leadership Council	SOAP
	CAP	Social Concerns
	Community role models	STEP
	Dropout prevention	Student leadership groups
	Drug abuse prevention	Terrific Kid
	Hug a Kid	
Alternative Discipline	Alternative discipline project	Peer counseling
	Group counseling	
Alternative Education	High school diploma program	SAPID
	SANDAPP	
Other	Career counseling	Mental health counseling

Use of Support Services. Survey data collected from secondary-level students in grades 8, 10, and 12 indicated that 44 percent of the student respondents (n=166) reported utilizing at least one of a broad range of services that support students in core curriculum courses. Among students who took advantage of such services, most (70 percent or more) felt that they had been "helped a lot" or at least "helped somewhat." The most frequently reported programs in which students participated included AVID, math and reading programs supported by Chapter 1 funds, the Basic Skills Tutorial program (Chapter 2), EXCEL (providing an extra period for study), the Student Opportunity and Access Program (SOAP), Social Concerns (drug and sex education), and Preparation to Reach College through Excellence and Perseverance (PREP).

Monitoring of Support Service Participation and Academic Progress. Prior reviews of the implementation of the core curriculum policy also recommended that sites (1) carefully *monitor student participation* in motivational programs, (2) *document the academic progress* of students participating in support programs to assess program impact, and (3) *identify and share successful student support programs* to promote success in core courses. Interview and survey data indicated that:

(1) Administrators at all 24 study sites identified some type of formal process to monitor student participation in support programs, usually in the form of a class attendance/roll call list or sign-up sheet. In contrast, only one out of four teacher respondents was able to identify a specific monitoring process at her/his site.

(2) All site principals also identified various approaches, depending on the curriculum, to monitor the academic progress of student participants in the support programs. Progress reports and pre/post test scores were the monitoring vehicles most frequently reported. According to principals, record-keeping appeared to be most rigorous for Chapter 1 and Chapter 2 students, as well as students participating in AVID. When teachers responded to this inquiry, less than one out of five indicated knowledge of specific approaches to monitoring academic progress of program participants.

(3) Twenty-two of the 24 study site principals reported that successful support services had been identified and shared with most or all teaching staff and with their governance teams. However, only slightly more than half the surveyed teachers (54 percent) agreed that such identification had occurred at their sites.

Teachers, counselors, and administrators were asked to describe the impact of services that support the core curriculum on student outcomes. Figure 33 illustrates how each group rated the degree to which academic achievement, behavior, and attendance were influenced by these programs. The data indicated that, when compared with other respondents, principals rated the impact of support services most highly, on average, followed by counselors and then teachers. Principals' and counselors' average ratings fell in the moderately to highly positive range in all three areas of achievement, behavior, and attendance; teachers' ratings were somewhat less positive, falling in the low to moderately positive range. An additional analysis revealed that teachers at the junior high/middle school level were more inclined to offer positive ratings than were senior high teachers.

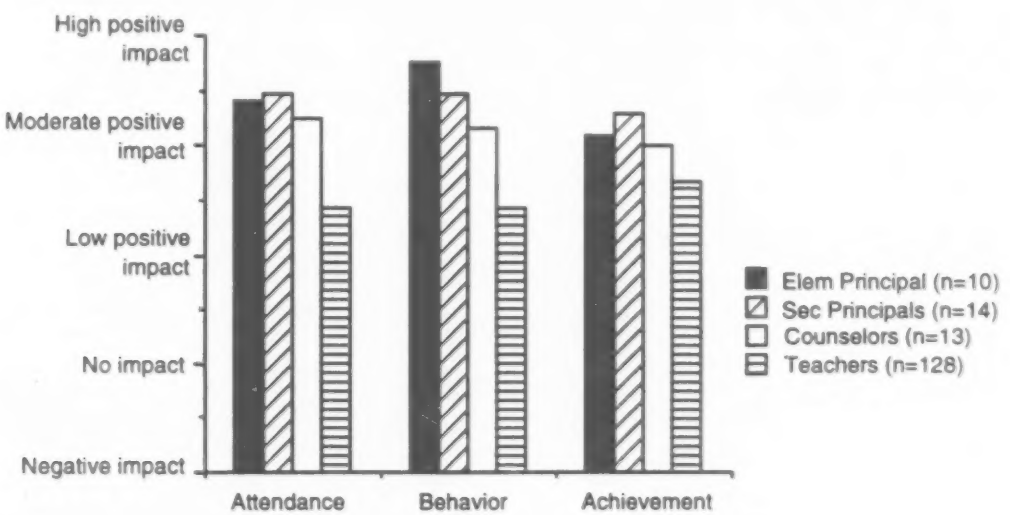

Figure 33. Impact of Support Services on Student Outcomes, As Reported by Principals, Counselors, and Teachers

Surveyed students were asked about informal support from their individual core subject teachers. Sixty-four percent of the students reported that they "were receiving enough support from teachers in (their) English, math, science, and social studies/history courses."

Staff Development

Prior assessment of the core curriculum policy also urged staff participation in staff development programs related to the core curriculum policy.

Administrators and counselors from 20 of the 24 study sites reported that staff development activities that addressed the implementation of the policy were offered during the past year; slightly less than half of the teacher respondents (45 percent) reported attending such inservices. Four site administrators indicated that staff development related to the core curriculum had been provided prior to the past year, following adoption of the policy.

Interview and survey data also indicated that all 24 sites sent teacher representatives to at least one (and generally more than one) additional off-site inservice relevant to core course work. These inservices included the following:

- New Standards Project
- Reading Recovery/ELIC
- Developmental learning
- Subject matter projects
- Mathematics Accented for Teachers in Elementary Schools Program
- Summer enrichment programs
- CLAS training
- Parent involvement training
- LLIFE
- Cognitively Guided Instruction Program
- SD Mathematics Enhancement Project

Roughly half of the teacher respondents reported participating in a summer enrichment program, parent involvement activities, subject matter projects, or CLAS training — all related to core subjects — during the past two years.

Enriched Curriculum in Elementary Grades

Included in the May 1992 evaluation of the common core curriculum, prepared by the Equity in Student Placement Practices Oversight Committee, was an analysis showing that norm referenced math test scores at grade one were predictive of math course enrollment at grade 7 (i.e., either Math 7 or Advanced Math Jr. High). The committee subsequently recommended that the district "implement an enriched core curriculum at the elementary school level to ensure that all students enter secondary school with an equal chance for success." Specifically addressed was "individualizing instruction in non-graded, multi-level classrooms" that "should extend to primary and early childhood programs."

In their formal response to this recommendation, curriculum staff stated that the core curriculum policy is "embedded in the textbook adoption process and the Master Plan for Instruction." Staff stated that the mathematics, science, language arts, social studies, and physical education offices were working with the Developmental Primary Committee to create a K-3 non-graded developmental continuum of behaviors. Observational record sheets to document such behaviors were scheduled for field-testing during the 1992-93 school year.

Developmental Primary Committee staff, who were interviewed for this study, reported that the developmental continuums were subsequently generated for grades K-2 in all above-mentioned subject areas; the continuum for language arts was expanded to include grades K-6. Attempts to document behaviors during the 1992-93 school year were limited to language arts, where curriculum staff provided all elementary sites with a continuum of observable behaviors, in addition to examples of ways in which they might choose to record those behaviors. There was no intent to standardize the procedure, and elementary sites were encouraged to use a form of documentation (including one of their own development) which best assessed their efforts.

Primary work in the area of language arts during the 1993-94 school year focused on the development of district standards and performance levels, which was intended to supplement the work completed on observable behaviors. Curriculum staff noted that, where the continuum of observable behaviors is largely illustrative, content standards and performance levels bring substantive changes to assessing achievement in language arts. Standards and performance levels were revised during the 1994-95 school year, based upon teacher input, and will be distributed for use in 1995-96.

Language arts curriculum staff speculated that, to date, very few sites have incorporated such documentation. Interviews with ten elementary principals for this study found that documentation has been implemented at six of the ten sites; plans to adopt a method of documentation at the other four sites have been developed.

Policy Implementation at Secondary-Level Sites

Curriculum Revisions and Impact. Enrollment patterns presented in Part I showed that non-core courses in the four primary academic areas have been largely eliminated, excepting limited course work for students with special language needs. Secondary-level administrators and counselors agreed that "unnecessary prerequisites or lower level/remedial" courses in the four primary academic areas have been largely eliminated at their sites. In explaining Physical and Life Science as a possible exception, one counselor suggested that the course may be remedial but necessary for students who struggle with the level of reading difficulty in the Biology textbook.

A small minority of teacher respondents (14 percent) indicated that, in their opinion, a number of "unnecessary" or "remedial" courses still exist at their sites. Math A and B, Pre-Algebra, and Physical and Life Science were the specific courses identified by most of these respondents.

Roughly one out of four student respondents (26.3 percent) believed that s/he had been required to take a course considered to be "unnecessary because it was lower level or remedial." African Americans were disproportionately represented among this group. Most frequently reported among the subject areas of these courses were mathematics, language arts, and "other" (non-core) course work. Somewhat fewer parents (17.8 percent) indicated that their students had been required to take lower level course work. Indochinese American parents and those in the "Other" ethnic category were overrepresented among those who indicated such course work.

Roughly one out of four students (23 percent) believed that s/he had been required to enroll in course work that had been "too difficult;" 16 percent of the parent respondents concurred. Indochinese American students and parents of grade 8 students were disproportionately represented among this group. When asked the subject area of "too difficult" course work, students were three times more likely to report mathematics than other subject areas.

Course Selection Process. In an effort to determine how students' core course selections are made as students articulate from elementary to junior high/middle school, principals, counselors, and teachers at the 24 study sites were asked to rate the importance of a number of relevant factors. Figure 34 provides the degree of importance, overall, that staff assigned influential factors such as academic grades, test scores, behavior, special needs, attendance, and parental input. Collectively, the four respondent groups rated special needs, teacher input, and parental input moderately to very important in considering course selection when students articulate. Test scores and student behavior were considered somewhat less important than other factors. When compared with other secondary-level respondents, teachers also assigned less importance to grades and student input in determining students' course work.

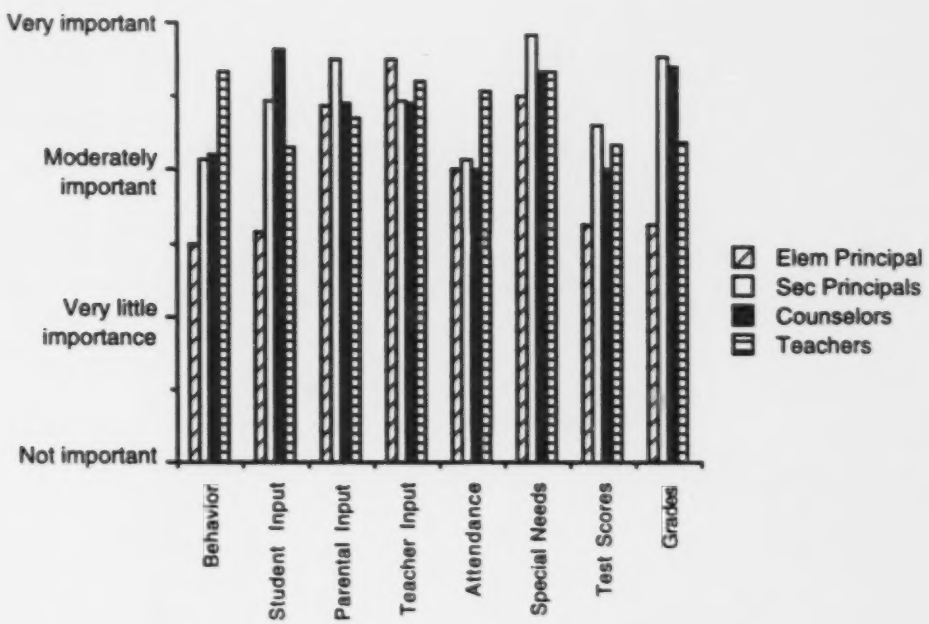

Figure 34. Importance of Various Factors on Course Selection at Elementary to Secondary Articulation

When asked about how they generally choose their course work, secondary-level students reported collaboration among a variety of interested parties, as shown in Table 31. Not surprisingly, the data suggest that the higher the grade level the more likely students are to make course selections independent of other advisors.

Table 31
CORE COURSE SELECTION PROCESS, As Reported by Student Respondents
By Grade Level

Decision Maker(s)	Grade 8 (n=114)	Grade 10 (n=161)	Grade 12 (n=98)
I decide.	10.5	16.8	37.8
The school counselor and I decide.	10.5	23.0	28.6
My parents, the counselor, and I decide.	14.9	29.2	14.3
My parents and I decide.	21.9	14.9	11.2
The school decides.	42.1	16.1	8.2

When additionally asked about access to courses, 65 percent of the student respondents reported that they "had as much access as other students to classes of (their) choice." Among the students who questioned equitable access to course work, African American students were overrepresented.

Sixty-two percent of parents surveyed for the study indicated that they "regularly assist their student when s/he is choosing her/his courses." Hispanic parents were disproportionately represented among those who reported that they did not regularly assist their children in course selection. When students were asked *how much* help their parents and counselors provided when selecting core courses, they reported that, on average, assistance from their parents and counselors fell in the "just a little help" to "some help" range. Students in grades 8 and 10 indicated that their parents provided somewhat more assistance than did their counselors.

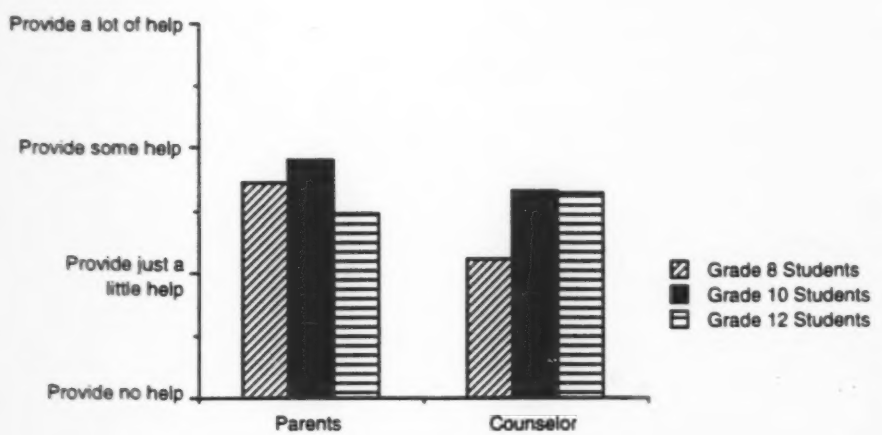

Figure 35. Level of Assistance from Parents and Counselors in Course Selection, As Reported by Students

Almost all parents reported feeling either "somewhat comfortable" (30 percent) or "very comfortable" (63 percent) in advising their students about choice of classes and did so "regularly." Among those who indicated that they were "not at all comfortable" providing such assistance, a broad majority (82 percent) reported being unfamiliar with the core curriculum policy; also disproportionately represented among this group were Hispanic parents.

Counseling Assistance. Eleven of 13 counselors at secondary-level sites reported that counseling with regard to core course selection is required yearly; only one counselor reported that such counseling was "required only when the student articulated from junior/middle school to high school," and the other counselor indicated that counseling was "optional." Depending on the site, the number of students served by each counselor ranged from roughly 100 to 675 students, with an average of around 475. About half the counselors estimated that they spent 0-20 minutes per year with each student to discuss course selection; the remaining counselors were equally divided between estimates of 20-40 minutes and 40-60 minutes of annual course counseling per student.

Principals at secondary-level schools estimated their counselors' loads to be somewhat higher, between 340 and 900 students; they were also more likely to estimate greater counseling time with students. Among all principals and counselors who were interviewed, all but one believed that the site counselor *does not* have adequate time to counsel students "in a way that results in full preparation for graduation, college entrance, or meaningful employment."

Only one out of three student respondents reported that they discussed their course selection with a school counselor when moving from elementary school to junior high or middle school. However, two-thirds of both student and parent respondents indicated that discussions between student and counselor about core course work at the secondary level have occurred at least once every year. The proportion of students in grades 10 and 12 who reported annual counselor conferences was twice that of students in grade 8.

Communication of Policy

Interview data provided by principals and counselors indicated that secondary-level sites have communicated the district's core curriculum policy to parents in a variety of ways. Newsletters, articulation packages, parent meetings/information night, an annual parent mailer package, open house, four-year plans for parents of eighth graders, and the Comprehensive Site Plan were all mentioned as avenues for dissemination.

Survey data indicated that less than ten percent of teacher respondents reported awareness of specific efforts at their sites to communicate the district's core curriculum policy to parents. Only one out of five student respondents and one out of three parent respondents reported familiarity with the policy. Very few parents reported participating in the policy's development (11 percent) or in "assessing or modifying" the core curriculum since its adoption (9 percent). However, a broad majority of parents (72 percent) indicated that they would like to know more about the policy.

Policy Review. All but two of the 14 secondary-level study site administrators reported that they have "regularly reviewed" the core curriculum to evaluate the status or success of its implementation. Slightly more than half the administrators indicated an "ongoing" process, while others reported an annual or biannual review. According to the administrators who were interviewed, the review committee at their sites included the principal and various teaching staff; additional staff and community representatives varied among sites but generally included a combination of counselors, parents, and various support staff.

Slightly less than one out of three teachers who were surveyed reported knowledge of a timely review of the core curriculum policy's implementation. Those who were aware of such a review indicated that their site conducted either an annual review or held regular discussions about the core curriculum at their monthly departmental meetings.

Opinion Regarding Policy Impact

Figure 36 shows to what degree principals, counselors, and teachers reported that the core curriculum policy has had an impact on student motivation levels, their career choices, reducing the rate of dropouts, and increasing student success in core course work. The data suggest that, in general, the respondents were reserved in correlating the impact of the core curriculum policy with these student outcomes, assigning a "low" to "moderate" impact on motivation, career choice, and course success and a "no" to "low" impact on lowering dropout rates.

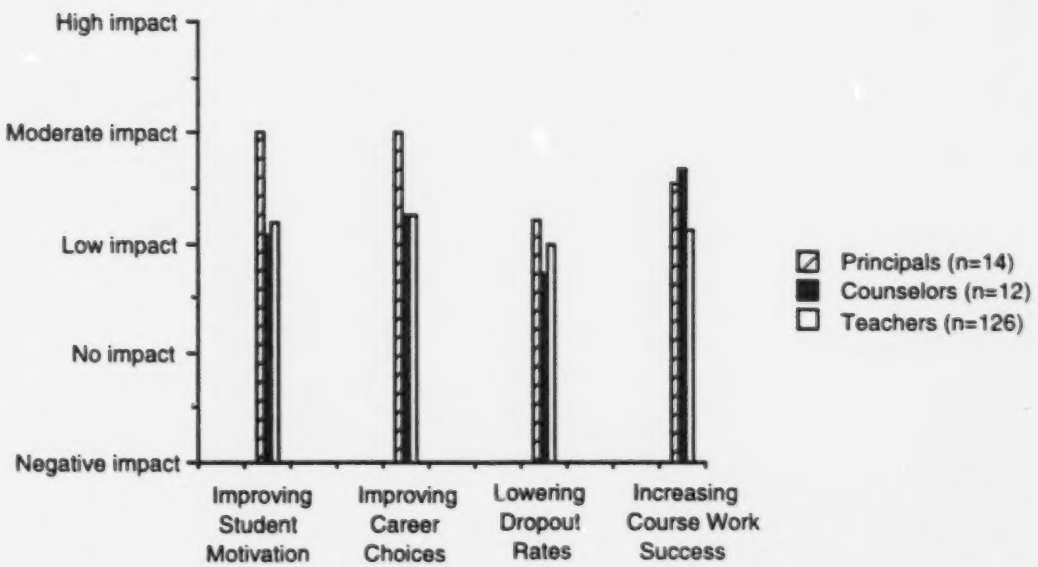

Figure 36. Impact of Core Curriculum on Various Student Outcomes, As Reported by Principals, Counselors, and Teachers

Figure 37 provides student and parent responses to questions linking course work to (1) academic expectations, (2) graduation requirements, and (3) readiness for either meaningful employment or (4) college entrance. The data indicated that a majority of students believed that their course work reflects high expectations of them (67 percent) and is preparing them to meet graduation requirements (81 percent) and college entrance (73 percent). Roughly 40 percent of the students reported that their course work is preparing them for meaningful employment after graduation from high school. Parent responses closely paralleled those of students.

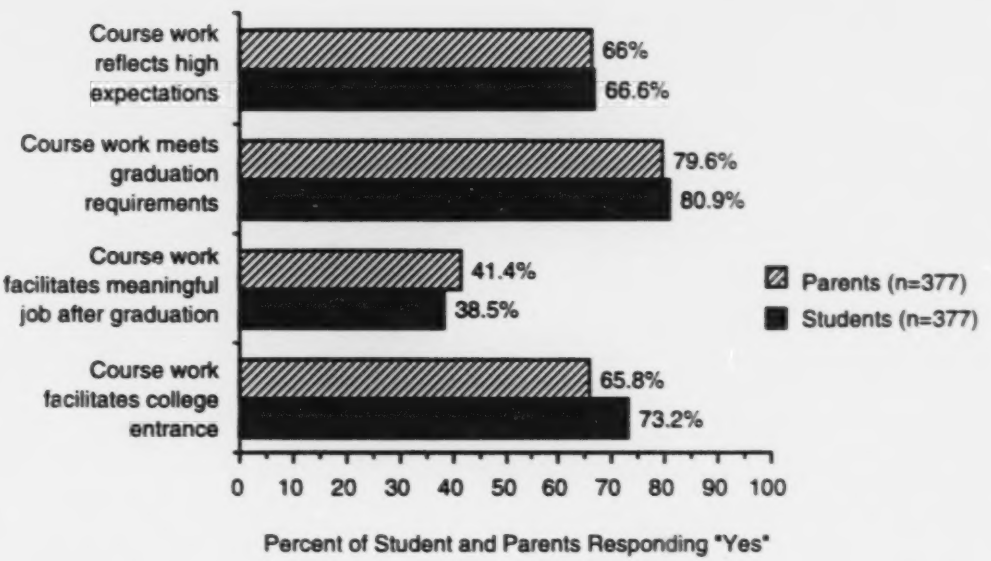

Figure 37. Assessment of Course Work Relative to Academic Expectations, Graduation Requirements, and Preparation for College or Employment, As Reported by Students and Parents

Students were also asked if they had ever considered not completing high school because they were dissatisfied with their course work. Figure 38 shows that, among the 17 percent (n=63) who reported such consideration, the two reasons most frequently given were that classes were "boring or uninteresting" and that school work "took too much time." (Most students provided more than one reason.) Disproportionately represented among this group of students were those in grade 12; least represented groups included White and Filipino American students.

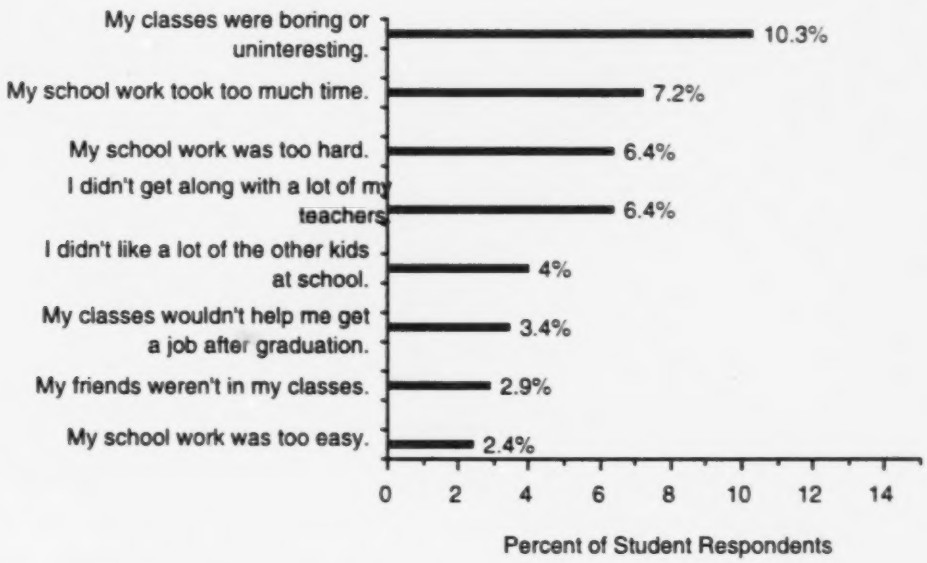

Figure 38. Students' Reasons for Considering Not To Complete High School

Secondary-level administrators, counselors, and teachers were also asked their perceptions of perceived constraints to implementing the core curriculum policy. Figure 39 provides a tabulation of responses to specific areas of constraint, in descending order of teachers' responses. The data revealed considerable disparity among the three groups with respect to policy constraints. However, at least 50 percent within each group agreed that insufficient resources to support students and the resistance of some students to be channeled into more difficult courses constrained the policy's implementation.

A large minority of all three groups also cited insufficient elementary preparation, the inability of some students to achieve under heightened expectations, and insufficient staff development. Particularly when compared with other respondents, a large proportion of teachers additionally identified disinterested parents, failure of the core curriculum to meet the needs of some students, and the dire socio-economic environment of some students as constraints to the policy's implementation.

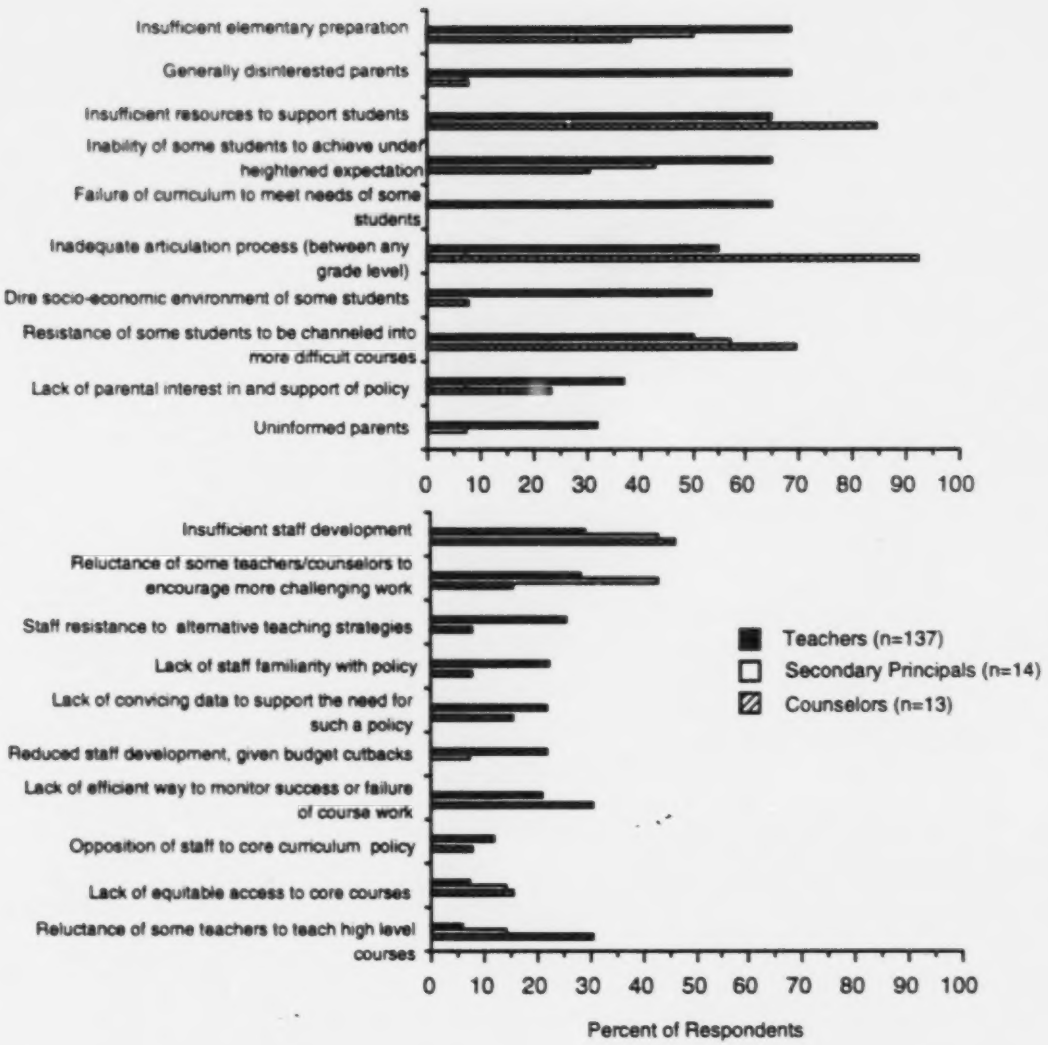
Insufficient elementary preparation
Generally disinterested parents
Insufficient resources to support students
Inability of some students to achieve under heightened expectation
Failure of curriculum to meet needs of some students
Inadequate articulation process (between any grade level)
Dire socio-economic environment of some students
Resistance of some students to be channeled into more difficult courses
Lack of parental interest in and support of policy
Uninformed parents
0 10 20 30 40 50 60 70 80 90 100
Insufficient staff development
Reluctance of some teachers/counselors to encourage more challenging work
Staff resistance to alternative teaching strategies
Lack of staff familiarity with policy
Lack of convicing data to support the need for such a policy
Reduced staff development, given budget cutbacks
Lack of efficient way to monitor success or failure of course work
Opposition of staff to core curriculum policy
Lack of equitable access to core courses
Reluctance of some teachers to teach high level courses
Teachers (n=137)
Secondary Principals (n=14)
Counselors (n=13)
0 10 20 30 40 50 60 70 80 90 100
Percent of Respondents

Figure 39. Constraints to Implementation of Core Curriculum Policy, As Reported by Teachers, Principals, and Counselors (NOTE: Not all groups identified some of the constraints.)

Unsolicited comments drawn from interviews with principals and counselors at the 24 study sites (paraphrased in Tables 32a-c) addressed various aspects of the core curriculum policy. Their comments focused primarily on (1) students at risk in core courses, (2) a perception of the policy's impracticality or inappropriateness for many students, (3) the lack of adequate

resources to support heightened expectations inherent in the policy, and (4) an ineffective articulation process between grades and school levels. The greatest number of concerns was expressed by administrators and counselors from senior high schools where the impact of the policy is likely more profound; however, junior high/middle schools also expressed a broad range of similar concerns.

Table 32a
PARAPHRASED COMMENTS OF PRINCIPALS AND COUNSELORS*

Issue	Paraphrased Comments
Core course achievement	Students can do the work, but some need more time to understand the material. We need to break away from the current six period schedule to develop ways that accommodate ways that students can learn. (S) We still face student deficiencies in reading the required text, especially science. Some teachers have adapted by using alternative teaching strategies; others have tried to dumb the course down. (S) The fact that students often transfer to alternative education sites has had more impact on keeping dropout rates down than has any positive effects of the core curriculum policy. (S) Many students cannot complete the required number of assignments for a grade within the semester time period. (S) Although the core curriculum policy challenges the student for whom heightened expectations can work, it frustrates the student who is already struggling. (J/M) Lots of kids who are having problems with the core math courses just want classes that provide them with the skills that are relevant to work after school. Kids say "Where am I going to use this?" Course work should be based on a "need to know." (S)
Post-secondary considerations	The policy may have broken down barriers and prerequisites, but we've gone too far by dropping career and vocational training. (S) We're pro core but also interested in school-to-work for the large population who needs it. The core curriculum policy eliminated courses appropriate for less abled students. Business English, for example, may be perfect for someone who wants to be a secretary. Math and science courses are also needed for this strand of kids. (S) We're still doing well with the top 30 percent. But those who don't want more than limited training for specific jobs are resistant to difficult course work that they feel is no use to them. (S) A college-bound curriculum contradicts the school-to-work tradition. Education should have relevance to the real world. (S) There's a community college system in place for students who decide they want to start over. We're not Japan where you have to accomplish it all by age 15 or you lose out permanently. (S)

* Site level is designated following comments: Elementary (E), Junior/Middle (J/M), or Senior high (S).

Table 32b (Continued)
PARAPHRASED COMMENTS OF PRINCIPALS AND COUNSELORS*

Issue	Paraphrased Comments
Socio-economic challenges	Our greatest challenge is dealing with the economic and otherwise difficult situations from which kids come to us. Our focus is simply getting kids ready to learn. (J/M) Parents need to be parents. Family needs should be a #1 priority. (J/M) Many of our students need emotional and psychological support before they can face their academic problems. School work isn't important when compared with the problems they bring from outside. They bring these problems to the classroom if they're not addressed. (J/M)
Second language needs	English-learning students do not have access to advanced placement courses. Many sites do not try to make the necessary staff changes to have qualified teachers in advanced course work for English Language Learners. (J/M) Our success with the core curriculum is due to the ability to instruct core classes in Spanish. (S) Eighty percent of our student population is either LEP or FEP. Half the students don't have access to core curriculum because the focus is on learning to speak and understand English. (J/M) Our Newcomer and Late Entrant populations are considerable. Coming from developing countries, language acquisition and vocational skills are their priorities. (S)
Equity	The equity issue is political; it's a false issue. Encouragement has always been there, but if the kids don't succeed they can't qualify for the next class in the sequence. The core reaps repeated failures; that's opportunity? (S) It is illogical to insist that ethnic balance is more important than what's best for individual students. The student should be allowed to retake a class rather than be set up for another failure. (S) The equity issue behind the policy is politically correct but practically incorrect. Forty percent of some populations have failed geometry twice! (S)
Mobility	Fifty percent of our present ninth grade class has changed within the present school year. (S) High mobility undermines our ability to document the success of our support services and to positively impact academic progress. (E) This site needs stability in administration. It's hard to move forward when the wheel is being reinvented every year or two under a new principal. (J/M)

* Site level is designated following comments: Elementary (E), Junior/Middle (J/M), or Senior high (S).

Table 32c (Continued)
PARAPHRASED COMMENTS OF PRINCIPALS AND COUNSELORS*

Issue	Paraphrased Comments
Articulation process	Grades and test scores are not included in the information that a counselor receives from the elementary site. (J/M) Some schools do not provide sufficient or pertinent information on continuing students; this is particularly true with LEP students. (J/M) We have students from all over the city come here for the magnet. We don't know who's coming until they enroll. (S) High schools receive almost no information regarding student behavior and attitude when they articulate from junior high/middle school. (S) Our teachers' attempts to recommend gifted students for advanced course work when they articulate to junior high often are not acted upon. (E) In the past, we've battled with the junior high we feed into, but the new administrator has improved the articulation process. (E)
Inability to assess progress	Support and resources for the core curriculum are far too few; the site can't adequately provide them. (J/M) The core curriculum is a good idea, but it should allow time to evaluate where the student has experienced success or failure. (S) Our counselors try to talk to many students, but the numbers are overwhelming. (J/M) My comprehensive site plan is an inch thick. If only we had time to focus on student learning. (E)
Staff development	Most staffs lack reinforcement or continuous staff development. Once the policy has been implemented, it continues without having a particular focus or support. (J/M) The core curriculum has had more impact on staff than on students. (S) Central office staff who dispense services to sites need more staff development from personnel outside San Diego. (S)
Elementary preparation	Reading ability is key to high school dropouts. If kids can't read and write when they leave elementary school, they're destined to find secondary-level course work difficult if not impossible. (J/M)
District support	The policy raised expectations that every core course teacher would be aided. But the verbal goals were never supported with general funds. Where is that money going? (S) After-school tutoring has been one of our most effective support services for core course work. Ironically, that's the class we had to give up because of class size reduction. (J/M) The district made a commitment to counseling services to support the core curriculum — until this year's focus on class size reduction. (S)

* Site level is designated following comments: Elementary (E), Junior/Middle (J/M), or Senior high (S).

SUMMARY OF FINDINGS: PART II

The analysis of interview and survey data suggests that:

1. Sites offer a broad range of programs which support students in their core course work. Forty-four percent of student respondents reported utilizing at least one such service — AVID, math and reading programs supported by Chapter 1 funds, and the Basic Skills Tutorial program (Chapter 2) in particular.

2. Roughly half of the teachers and all site administrators reported that successful support services at their sites had been identified and shared with teaching staff and governance teams. Fewer than one out of four teachers reported awareness of specific strategies to monitor either student participation in such support programs or the academic progress of these participants; all principals, however, identified such strategies at their sites.

3. Teachers reported, on average, that services to support students in their core curriculum have had a low to moderately positive impact on their academic performance, behavior, and attendance. Principals and counselors rated such impact in the moderately to highly positive range.

4. Roughly half of the teacher respondents indicated that they had participated in staff development activities related to the core curriculum during the past two years.

5. According to principals, six of the ten elementary study sites have implemented a method to document observable student behaviors on a developmental continuum within language arts instruction; plans at the other four sites to document such behavior have been developed. Curriculum staff reported that primary work in the area of language arts during the 1993-94 school year focused on the development of district standards and performance levels, which was intended to supplement the work completed on observable behaviors.

6. A decided majority of secondary-level principals, counselors, and teachers believe that "unnecessary prerequisites or lower level/remedial" courses in the four primary academic areas have been largely eliminated at their sites. Roughly one out of four students believed that s/he had been required to take such a course, however; African Americans were disproportionately represented among this group. A similar proportion of students reported that they had been required to take a course (generally mathematics) that was "too difficult."

7. Sixty-five percent of the student respondents indicated that they had "as much access as other students to classes of (their) choice." Among students who questioned equitable access to course work, African American students were overrepresented.

8. Students reported, on average, that their parents and counselors provided "just a little" or "some" help in assisting them with course selection. The higher the grade level, the more likely students were to report making course selections independent of other advisors.

9. Among site principals and counselors who were interviewed, all but one believed that counselors *do not* have adequate time to counsel students "in a way that results in full preparation for graduation, college entrance, or meaningful employment."

10. While site staff identified a variety of ways that they have communicated the district's core curriculum policy to parents, only one out of three parent respondents and one out of five student respondents reported familiarity with the policy. A broad majority of parents (72 percent), however, indicated that they would like to know more about the policy.

11. Teachers were decidedly reserved in crediting the core curriculum policy for improving student motivation and career choices, lowering dropout rates, or increasing course work success. Their overall ratings of the policy's "low" positive impact on these outcomes fell well below the more "moderate" impact ratings provided by their principals.

12. A majority of student respondents believe that their course work reflects high expectations of them (67 percent) and is preparing them to meet graduation requirements (81 percent) and college entrance (73 percent). Less than half the students (40 percent) reported that their course work is preparing them for meaningful employment after graduation from high school. Parent responses closely paralleled those of students.

13. Among the 17 percent of student respondents who reported that they have considered not completing high school, the two most frequently cited reasons included dissatisfaction with "boring or uninteresting" course work and course work that "took too much time."

14. Site administrators, counselors, and teachers identified (with no particular consensus) a broad range of constraints to implementing the core curriculum policy. At least 50 percent within each group agreed that the policy's implementation was constrained by (a) insufficient resources to support students in core courses and (b) the resistance of some students to be channeled into more difficult courses. A considerable proportion of respondents, particularly teachers, additionally identified (c) insufficient elementary preparation, (d) disinterested parents, (e) the inability of some students to achieve under heightened expectations, (f) the failure of the core curriculum to meet the needs of some students, and (g) the dire socio-economic environment of some students.

CONCLUSIONS

Longitudinal study data which focused on math course enrollment showed that, for many students, course enrollment at grade 7 is somewhat predictive of math enrollment and achievement patterns throughout high school. When compared with seventh-grade students who were enrolled in Advanced Math Junior High, a higher proportion of students who were enrolled in Math 7 earned lower math course marks, earned lower citizenship marks, were enrolled in course work intended for earlier grade levels, completed a less advanced pattern of course work, were retained at grade level, fell short of graduation requirements, and dropped out of school. The six-year study also revealed that students who were enrolled in Math 7 generally remained in the regular math sequence through high school; roughly half of the students who were enrolled in the advanced math pattern at grade 7 also later crossed over to the regular math sequence. In other words, a broad majority of this cohort either remained within the regular math course pattern or abandoned the advanced math sequence to enroll in less rigorous work. However, while many students fell short of more advanced math course work, most students in the cohort had taken at least one college preparatory math course (College Math or higher) prior to graduation.

Study data revealed that "remedial or lower-level" course work at the secondary level has been removed from the language arts, math, science, and social studies/history curriculum; very limited exceptions represent special language needs. The elimination of such course work has had understandably little impact on successful students. But many study subjects questioned the wisdom of such a policy with respect to students who are struggling in their core course work and have experienced repeated failure. Remediation efforts for these students presently rely on a variety of support services and bridging practices. Teachers' perceptions and course grades suggest that these safety nets must be strengthened.

Enrollment and achievement data suggest that the core curriculum policy has not fully eradicated academic "stratification" (as identified in the literature). African American and Hispanic students continue to be considerably overrepresented in courses intended for earlier grade levels and in retention and dropout statistics; English Language Learners are also overrepresented in less advanced course work. Asian American and White students, on the other hand, are overrepresented in advanced course work and earn higher course grades on average. A majority of study subjects agreed that students have access to a broad range of course enrollment opportunities and services which support them in core course work; a majority also believed that students are held to high expectations. Nonetheless, neither academic success nor upper-level course enrollment has as yet been the experience of *all* students.

Study data suggest that programming students into core course work that is "appropriate to their respective levels of preparation, motivation, and ability/achievement," as stated in the core curriculum proposal, is often difficult to implement. For the student who demonstrates a low level of *preparation* or *ability,* support services (when sufficient and utilized) provide needed assistance. But some students still fail despite these additional efforts, according to staff, and repeated failure undoubtedly reinforces dropout tendencies. The student with a low level of *motivation* also presents a serious though perhaps more frustrating challenge. Almost one out of five student respondents had considered not completing high school, and the reasons most frequently given were that their courses were "boring or uninteresting" or "took too much time."

The data additionally question the availability of sufficient counseling to assist students in selecting appropriate course work. A decided majority of principals, counselors, and teachers reported that counseling opportunities were inadequate for a student's "full preparation for graduation, college entrance, or meaningful employment." The data also question the effectiveness of support services intended to assist needy students in succeeding in their core course work. Acknowledging that such services have had only a modest influence on academic performance and attitude, site staff contend that insufficient resources have significantly limited their ability to effectively assist low-achieving students in this more rigorous curriculum. (To illustrate the competing demands for site resources, the recent "Review of the Initial Phase of the Implementation of the Class Size Reduction Policy" noted that, at some sites, class size reduction was achieved at the expense of valuable support programs and services.)

According to study data, disinterested or uninformed parents and the dispiriting socio-economic circumstances of many students also present formidable obstacles to academic success (and therefore the policy's effectiveness). Given the contributions of parent involvement and economic advantage in enhancing opportunity for academic success, effective support services and bridging practices to nurture the less prepared and less supported students become critical.

In contrast to the challenges posed by students who find their course work too difficult, it is also important to acknowledge a segment of the student population, and their parents (roughly 15 percent of both study groups), who believe that their core course work does *not* reflect high expectations of them; another 17 percent were "not sure" if their classes held them to high expectations. Similar sentiments were expressed by one in three teaching staff respondents who knew colleagues who were "reluctant to encourage more challenging work." Such practices raise concern about what the literature refers to as the "watering down" or "dumbing down" of the curriculum — a practice which turns the intent of the core curriculum policy on its head by *lowering* standards to the level of the less skillful at the expense of the more capable.

By most accounts, implementation of the policy has ensured access to a common core curriculum program and has eliminated a number of previously identified barriers. A number of sobering challenges to the practical application of this curriculum persist, however, at the student, staff, district, and community level. In the unfortunate climate of increased competition for diminishing resources, the district must determine how best to confront the issues within its control.

RECOMMENDATIONS

Drawing from evaluation findings, it is recommended that sites:

1. Continue efforts to bridge the gap between the academic achievement of African American and Hispanic students and that of other ethnic groups.

   Rationale: Although there was some variance depending on curriculum area and grade level, average course grades for African American and Hispanic students were *significantly* lower than those for other ethnic groups. In most core courses and at all three grade levels that were studied, Asian American, Indochinese American, Filipino American, and White students earned a course grade that was, on average, from one-half grade higher to more than one full grade higher than that earned by their African American and Hispanic classmates.

2. Embrace all opportunities for teaching staff to participate in staff development in language arts, math, science, social studies/history, cooperative learning, developmental learning, and other strategies which facilitate improved student achievement.

   Rationale: The core curriculum proposal acknowledged that "the district must ensure that the proposed change addresses teaching as well as content of courses." Teachers are encouraged to take advantage of training opportunities offered within the district and through professional organizations, as well as those provided by their own site programs, to improve teaching skills. In particular, acquisition of effective bridging practices are critical to the academic progress of less-prepared students.

   The "Critical Friend" and "1274 Protocol" processes also promote effective teaching and learning by facilitating honest dialogue about student work and progress toward site goals. These strategies of analysis have been implemented by many school systems that recognize the need for assessment feedback to evaluate learning.

3. Strengthen out-of-classroom support programs that assist students in their core curriculum course work.

   Rationale: The policy's steering committee aptly predicted that some students would experience considerable challenge given the higher level of difficulty reflected in the core curriculum policy and consequently require additional learning assistance. While sites have responded with a wide variety of programs to support these students, teaching staff believe that such services have only modestly impacted academic outcomes and student behavior. Reinforcing these support services may help to counteract a high rate of failing grades in core course work among various groups of students.

4. Build broader awareness among teaching staff about (a) which support services have proven most successful in assisting students in core course work and (b) how the site is monitoring the academic progress of students using these services.

Rationale: Only half the surveyed teachers reported that successful support services have been identified and shared with them, and only one out of five indicated knowledge of specific approaches to monitoring the academic progress of program participants. Support services will be most effective when the site (a) identifies successful programs among current offerings and shares this information with all teaching staff, and (b) establishes a system of monitoring both program participation and the academic progress of the participant.

5. Implement strategies to enroll and support English Language Learners in upper-level core curriculum course work, particularly beyond grade 7.

   Rationale: When compared with English-proficient students, English Language Learners beyond grade 7 were underrepresented in upper-level core curriculum courses. The percent of English Language Learners enrolled in Algebra 1-2 (22.6 percent) and in Biology 1-2 (24.7 percent) — both less advanced course work for grade 11 students — was almost twice that of other students. Second Language staff concur that English Language Learners will meet the challenge of more rigorous course work when it is accompanied by services that acknowledge their language needs.

6. Document the observable behaviors of elementary-level students on a developmental continuum for each primary subject area; include followup documentation at every grade level.

   Rationale: A 1992 study of student achievement, conducted by the Equity in Student Placement Practices Oversight Committee, revealed that academic stratification at the secondary level, manifested in course enrollment and achievement, begins as early as grade one. The practical classroom-level work of documenting observable behaviors at the elementary level, supplemented by the development of standards and performance levels, identifies the student's level of skill and the potential need for *early* intervention. Portfolio assessment, a component of the district *Plan to Improve Student Achievement, and Organizational Effectiveness,* can provide importance evidence of academic progress as a student makes the transition from grade to grade.

7. Strengthen the articulation process between grade levels to ensure enrollment in course work that is appropriate for the student's capabilities.

   Rationale: Study data showed that a majority of subjects believes that an inadequate articulation process between grade levels constrains the effective implementation of the district's core curriculum. A thoughtful review of a student's academic progress is critical to ensuring an appropriate course of study. Such an individualized approach identifies important distinctions among those who require intervention, those whose current pattern of course work appears appropriate, and those for whom more advanced work should be encouraged. Such an approach also assumes effective counseling services — and district resources to ensure them.

It is furthermore recommended that the district:

8. Continue to foster a climate of high expectations and high standards that assumes that students can and must work to their full capabilities in order to fully prepare themselves for meaningful employment or college enrollment following high school.

   Rationale: The core curriculum policy was founded on the premise that a strong academic curriculum was critical to post-secondary success and that support for such a curriculum required a strong consensus among district educators. The proposal initially urged a "public information campaign" to disseminate the core curriculum philosophy among teachers, principals, parents, and students. Considering numerous challenges to the policy's effective implementation, it may be timely to renew efforts to hold the ideal in focus.

   A renewed information campaign specifically targeting parents may be particularly useful, given that three out of four parent respondents indicated that they would like to know about the core curriculum policy. Furthermore, among those who reported that they were "not at all comfortable" advising their students about course selection, 82 percent said that they were unfamiliar with the policy.

9. Explore the literature generated by *resilience research* and research on *secondary cultural or language differences* for potentially effective strategies that can be shared with teaching staff through staff development inservices.

   Rationale: With its focus on the traits, coping skills, and supports that help students survive — even thrive — in a challenging environment, the products of resilience research may reinforce other efforts to promote heightened expectations and motivation for academic excellence. The literature notes that, while practices such as tracking, readiness testing, Chapter 1, special education, and ability grouping may serve the needs of some students, these measures are often inconsistent with the notions of "protective mechanisms" and "resilience" where greater attention is paid to inherent strengths and developed abilities.

   It may also be helpful to revisit the literature which focuses on assisting students with secondary cultural or language differences. For example, educators such as John Ogbu have argued that teachers and other interventionists must acknowledge that many children bring to school frames of references that are not only different from but oppositional to those of the mainstream (see earlier Summary of Relevant Literature). Specific strategies for assisting these children include teaching them to separate attitudes and behaviors enhancing school success from those that lead to linear acculturation (or "acting White") and to adopt a strategy of "accommodation without assimilation." In general, such strategies may generate improved student achievement by helping particular students to recognize and accept the fact that they can participate in two cultural or language frames of reference for different purposes without losing their own cultural and language identity or undermining their loyalty to the minority community.

10. Assess to what extent the proposed budget requirements for all five phases of the core curriculum policy's implementation were fulfilled (the proposal estimated $4.8 - $6.2 million) and to what extent present budget considerations will allow continued support.

Rationale: Board approval of the policy in 1988 was based on four assumptions, including a commitment of resources to ensure its successful implementation. The steering committee acknowledged that "a great deal of staff training (was) needed ... Tutorial and counseling support must be available for students ... Additional facilities and instructional materials may be required ... Special attention (must) be given to the increasing number of students with language needs who will require special support ... (The policy) will require a substantial budget for additional teachers and counselors, facilities, staff development, and instructional materials." Study sites noted the lack of such resources as a primary constraint to the full and effective implementation of the policy.

If financial support to improve services to students who require assistance in core course work is determined to be unavailable, it may be necessary to explore the efficacy of *required supplementary* course work to improve opportunity for success in core courses. An approach to curriculum delivery which honors equity and heightened expectations, but which also guarantees the basic foundations upon which academic success in core subjects can be realized, may ameliorate the insecurity and dissatisfaction of students at risk and improve their chance of experiencing their course work as both surmountable and relevant.

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APPENDIX A

ELEMENTARY-LEVEL PRINCIPAL INTERVIEW INSTRUMENT

PRINCIPAL INTERVIEW: CORE CURRICULUM STUDY
Elementary-Level Sites

School: _____

1. Which of the following student services does your site provide to ensure the success of students enrolled in the common core curriculum, and when are they available? *(Probe for others; enter below.)*

Service	During the day	After school	Weekends
Basic Education Skills Tutorial (BEST) Program			
Chapter 1: Math and Reading Labs			
Chapter 1: Family Reading			
Chapter 1: Family Math			
Chapter 2: Basic Skills Tutorial Program			
Off-track mathematics courses			
African American Male Advocacy Program			
Black Leadership Council			
Project CLIMB			
Project System to Encourage Potential (STEP)			
Maintenance and Motivation Program (dropout prevention)			
Mathematics, Engineering, Science Achievement (MESA)			
Opportunity Program			
San Diego Urban Collaborative			
Student Training and Rehabilitation (STAR)			
Student Leadership Groups (training by R/HR facilitators)			
Community role models for students			
Alternative Discipline (In-school/after-school suspension)			
Educational Talent Search (Ch. 1 and low-income students)			
Career Awareness Program (CAP)			
After-School Math Enrichment (NSF)			

2. How is the attendance of students receiving these services monitored?

____ Student sign-up sheet ____ Roll call ____ Teacher/Counselor follow-up ____ Not sure

____ Other: Please specify _____

3. How does your site monitor the academic progress of the students receiving these services?

___ No formal monitoring system ___ Teacher conferences ___ Not sure

___ Skills tests ___ Counselor conferences

Other; please specify: _____

4. In your opinion, to what degree have these services generally impacted the following student outcomes?

Factor	High Impact (3)	Moderate Impact (2)	Low Impact (1)	No Impact (0)
Academic Achievement				
Attendance				
Behavior and Attitude				

5. Have successful student support programs at your site been identified? ___ Yes ___ No ___ Not sure

If yes, have these programs been shared with your teaching staff? ___ Yes ... How many? ___ Some ___ Most/All ___ No ___ Not sure

If yes, have these programs been shared with your site's governance team? ___ Yes ___ No ___ Not sure

6. At the time of articulation from elementary to secondary school, how important are the following factors when a student's course work is decided? *(Probe for other possible factors; enter below.)*

Factor	Very Important (3)	Moderately Important (2)	Very Little Importance (1)	Not Important (0)
Grades				
Test Scores				
Special Needs (Second Language, Chapter 1, Special Ed, GATE)				
Attendance				
Teacher Input				
Parental Input				
Student Preference				
Behavior and Attitude				

7. Has your site provided any staff development activities related to the implementation of the core curriculum during the past year? ___ Yes ___ No ___ Not sure

If no, has your site provided any staff development activities related to the core curriculum policy since its implementation in 1989? ___ Yes ___ No ___ Not sure

8. During the past two years, have teachers at your site participated in any of the following activities?

Activity	Yes	No	If yes, roughly what percent?
Cognitively Guided Instruction Program			
San Diego Mathematics Enhancement Project			
Summer Enrichment Programs			
Parent Involvement Activities			
Subject Matter Projects			
Developmental Learning			
CLAS Training			
New Standards Project			
Reading Recovery/ELIC			
Mathematics Accented for Teachers in Elem Schools Program			

9. Does your site ensure that students are placed in the curriculum at a point that is developmentally appropriate?

___ Always ___ Usually ___ Sometimes ___ Seldom

10. Where necessary to sustain mastery and success, does your site provide individualized instruction in non-graded, multi-level environments?

___ Always ___ Usually ___ Sometimes ___ Seldom

11. Has your site documented student behaviors, as provided in the developmental continuum for language arts? ___ Yes ___ No

If no, do you have plans to develop or adopt a method of documentation? ___ Yes ___ No

12. Which of the following subject areas comprise the core curriculum at your site?

___ Math ___ English language arts ___ Health

___ Social Studies ___ Spanish language arts ___ Physical Education

___ Science ___ ELEPS ___ Fine Arts

___ Other; please specify _____

APPENDIX B

SECONDARY-LEVEL PRINCIPAL INTERVIEW INSTRUMENT

PRINCIPAL INTERVIEW: CORE CURRICULUM STUDY
Secondary-Level Sites

School: _____ ___ Jr/Mdl ___ Sr High

1. Which of the following student services does your site provide to ensure the success of students enrolled in the common core curriculum, and when are they available? *(Probe for others; enter below.)*

Service	During the day	After school	Weekends
Basic Education Skills Tutorial (BEST) Program			
Chapter 1: Math and Reading Labs			
Chapter 1: Family Reading			
Chapter 1: Family Math			
Chapter 2: Basic Skills Tutorial Program			
Off-track mathematics courses			
African American Male Advocacy Program			
Black Leadership Council			
Project CLIMB			
Project System to Encourage Potential (STEP)			
Maintenance and Motivation Program (dropout prevention)			
Mathematics, Engineering, Science Achievement (MESA)			
Opportunity Program			
San Diego Urban Collaborative			
Student Training and Rehabilitation (STAR)			
Student Leadership Groups (training by R/HR facilitators)			
Community role models for students			
Alternative Discipline (In-school/after-school suspension)			
Educational Talent Search (Ch. 1 and low-income students)			
Career Awareness Program (CAP)			
After-School Math Enrichment (NSF)			
Advancement Via Individual Determination (AVID)			
Newcomer Program (LEP)			
Advisory Period for At-Risk Students			
Student Opportunity and Access Program (SOAP)			
SAPID (nursery and educational program for young mothers)			
SD Adolescent Pregnancy and Parenting Program (SANDAPP)			
Preparation to Reach College through Excellence and Perseverance (PREP)			
High School Diploma Program (HSDP)			
Academic APT Program (associated with UCSD)			
EXCEL (extra period for study)			

2. How is the attendance of students receiving these services monitored?

____ Student sign-up sheet ____ Roll call ____ Teacher/Counselor follow-up ____ Not sure

____ Other: Please specify _____

3. How does your site monitor the academic progress of the students receiving these services?

____ No formal monitoring system ____ Teacher conferences ____ Not sure

____ Skills tests ____ Counselor conferences

Other; please specify: _____

4. In your opinion, to what degree have these services generally impacted the following student outcomes?

Factor	High Impact (3)	Moderate Impact (2)	Low Impact (1)	No Impact (0)
Academic Achievement				
Attendance				
Behavior and Attitude				

5. Have successful student support programs at your site been identified? ____ Yes ____ No ____ Not sure

If yes, have these programs been shared with your teaching staff? ____ Yes ... How many? ____ Some ____ Most/All ____ No ____ Not sure

If yes, have these programs been shared with your site's governance team? ____ Yes ____ No ____ Not sure

6. At the time of articulation from elementary to secondary school, how important are the following factors when a student's course work is decided? *(Probe for other possible factors; enter below.)*

Factor	Very Important (3)	Moderately Important (2)	Very Little Importance (1)	Not Important (0)
Grades				
Test Scores				
Special Needs (Second Language, Chapter 1, Special Ed, GATE)				
Attendance				
Teacher Input				
Parental Input				
Student Preference				
Behavior and Attitude				

7. As a part of on-going placement in core courses at your site, how important are the following factors when a student's course work is planned? *(Probe for other possible factors; enter below.)*

Factor	Very Important (3)	Moderately Important (2)	Very Little Importance (1)	Not Important (0)
Grade				
Test Scores				
Special Needs (Second Language, Chapter 1, Special Ed, GATE)				
Attendance				
Teacher Input				
Student's post-secondary plans				
Parental Input				
Student Preference				
Behavior and Attitude				

8. Has your site provided any staff development activities related to the implementation of the core curriculum during the past year? ___ Yes ___ No

   If no, has your site provided any staff development activities related to the core curriculum policy since its implementation in 1989? ___ Yes ___ No ___ Not sure

9. Has your site developed a procedure whereby the core curriculum is regularly reviewed to evaluate the status or success of its implementation? ___ Yes ___ No

   If yes, how often does your committee meet to discuss the common core curriculum:

   ___ Annually ___ One review since policy was adopted ___ Two reviews since policy adopted

   ___ Other; please specify _____

   What staff/community members regularly participate in this process:

   ___ Principal ___ Teachers ___ Support staff ___ Parents ___ _____

10. How is the district's common core curriculum policy communicated to parents at your site (i.e., the effort to ensure access for all students to a core program that meets the requirements for high school graduation, college entrance, and meaningful employment)?

    ___ No formal communication process ___ Part of course sign-up package ___ Newsletter/flyer

    ___ Parent/teacher conference Other; please specify: _____

11. In your opinion, do any unnecessary prerequisites or lower level/remedial courses, associated with the common core curriculum, still exist at your site? ___ Yes ___ No ___ Not sure

If yes, please specify what subject area and course title:

___ Language Arts _____ ___ Mathematics _____
___ Science _____ ___ Social Studies _____
___ History _____ ___ _____ _____

12. Please estimate how many students individual counselors at your site serve during a semester? _____

13. As a rough average, how many minutes per year do you estimate each student spends with a counselor to discuss the selection of course work? ___ 0-20 min. ___ 20-40 min. ___ 40-60 min. ___ 1-1.5 hrs.
Other: Please specify _____

14. Do you feel that counselors at your site have adequate time to counsel students in a way that results in full preparation for graduation, college entrance, or meaningful employment? ___ Yes ___ No

15. What constraints to implementing the common core curriculum policy have you experienced or observed?

___ Lack of specific articulation
___ Insufficient staff development
___ Insufficient resources/time to counsel and support individual students
___ Lack of convincing data to support the need for such a policy
___ Inability of some students to achieve under heightened expectations
___ Reluctance of some teachers to teach higher level courses
___ Core curriculum fails to meet need of LEP students
___ Uninformed parents
___ Disinterested parents
___ Resistance of some students to be channeled into more difficult courses
___ Reluctance of some teachers/counselors to encourage more challenging work for some students
___ Insufficient elementary preparation
___ Lack of efficient way to monitor success/failure
___ Lack of equitable access to core courses
___ Lack of materials to support core course work
___ Staff resistance to learning alternative teaching strategies
___ Reduced staff development, given cut-backs
___ Philosophical opposition of staff to core policy
___ Lack of staff familiarity with core curriculum policy
___ None

16. In your opinion, to what degree has the common core curriculum policy had a positive impact on:

Factor	High Impact (3)	Moderate Impact (2)	Low Impact (1)	No Impact (0)
Student motivation levels				
Student career choices				
Lowering dropout rates				
Increasing course work success				

APPENDIX C

COUNSELOR INTERVIEW INSTRUMENT

COUNSELOR INTERVIEW: CORE CURRICULUM STUDY

School: _____ ___ Elem ___ Jr/Mdl ___ Sr High

1. Which of the following student services does your site provide to ensure the success of students enrolled in the common core curriculum, and when are they available? (Probe for others; enter below.)

Service	During the day	After school	Weekends
Basic Education Skills Tutorial (BEST) Program			
Chapter 1: Math and Reading Labs			
Chapter 1: Family Reading			
Chapter 1: Family Math			
Chapter 2: Basic Skills Tutorial Program			
Off-track mathematics courses			
African American Male Advocacy Program			
Black Leadership Council			
Project CLIMB			
Project System to Encourage Potential (STEP)			
Maintenance and Motivation Program (dropout prevention)			
Mathematics, Engineering, Science Achievement (MESA)			
Opportunity Program			
San Diego Urban Collaborative			
Student Training and Rehabilitation (STAR)			
Student Leadership Groups (training by R/HR facilitators)			
Community role models for students			
Alternative Discipline (In-school/after-school suspension)			
Educational Talent Search (Ch. 1 and low-income students)			
Career Awareness Program (CAP)			
After-School Math Enrichment (NSF)			
Advancement Via Individual Determination (AVID)			
Newcomer Program (LEP)			
Advisory Period for At-Risk Students			
Student Opportunity and Access Program (SOAP)			
SAPID (nursery and educational program for young mothers)			
SD Adolescent Pregnancy and Parenting Program (SANDAPP)			
Preparation to Reach College through Excellence and Perseverance (PREP)			
High School Diploma Program (HSDP)			
Academic APT Program (associated with UCSD)			
EXCEL (extra period for study)			

2. How is the attendance of students receiving these services monitored?

____ Student sign-up sheet ____ Roll call ____ Teacher/Counselor follow-up

____ Other: Please specify _____

3. How does your site monitor the academic progress of the students receiving these services?

____ No formal monitoring system ____ Teacher conferences ____ Counselor conferences

____ Skills tests Others; please specify _____

_____

4. In your opinion, to what degree have these services generally impacted the following student outcomes?

Factor	High Impact (3)	Moderate Impact (2)	Low Impact (1)	No Impact (0)
Academic Achievement				
Attendance				
Behavior and Attitude				

5. Have successful student support programs at your site been identified? ____ Yes ____ No ____ Not sure

If yes, have these programs been shared with your teaching staff? ____ Yes ... How many? ____ Some ____ Most/All ____ No ____ Not sure

If yes, have these programs been shared with your site's governance team? ____ Yes ____ No ____ Not sure

6. At the time of articulation from elementary to secondary school, how important are the following factors when a student's course work is decided? (Probe for other possible factors; enter below.)

Factor	Very Important (3)	Moderately Important (2)	Very Little Importance (1)	Not Important (0)
Grades				
Test Scores				
Special Needs (Second Language, Chapter 1, Special Ed, GATE)				
Attendance				
Teacher Input				
Parental Input				
Student Preference				
Behavior and Attitude				

7. As a part of on-going placement in core courses at your site, how important are the following factors when a student's course work is planned? (Probe for other possible factors; enter below.).

Factor	Very Important (3)	Moderately Important (2)	Very Little Importance (1)	Not Important (0)
Grades				
Test Scores				
Special Needs (Second Language, Chapter 1, Special Ed, GATE)				
Attendance				
Teacher Input				
Student's Post-Secondary Plans				
Parental Input				
Student Preference				
Behavior and Attitude				

8. Has your site provided any staff development activities related to the implementation of the core curriculum during the past year? ___ Yes ___ No ___ Not sure

If no, has your site provided any staff development activities related to the core curriculum policy since its implementation in 1989? ___ Yes ___ No ___ Not sure

9. Has your site developed a procedure whereby the core curriculum is regularly reviewed to evaluate the status or success of its implementation? ___ Yes ___ No ___ Not sure

If yes, how often does your committee meet to discuss the common core curriculum:

___ Annually ___ One review since policy was adopted ___ Two reviews since policy adopted

___ Other; please specify _____

What staff/community members regularly participate in this process:

___ Principal ___ Teachers ___ Support staff ___ Parents ___ _____

10. How is the district's common core curriculum policy communicated to parents at your site (i.e., the effort to ensure access by all students to a core program that meets the requirements for high school graduation, college entrance, and meaningful employment)?

___ No formal communication process ___ Part of course sign-up package ___ Newsletter/flyer

___ Parent/teacher conference Other; please specify: _____

___ Not sure

11. In your opinion, do any unnecessary prerequisites or lower level/remedial courses, associated with the common core curriculum, still exist at your site? ___ Yes ___ No

If yes, please specify what subject area and course title:

___ Language Arts _____ ___ Mathematics _____
___ Science _____ ___ Social Studies _____
___ History _____ ___ _____ _____

12. When students are selecting their coursework, is counseling required or optional?

___ Required yearly ___ Required only when articulating from jr/mdl to senior high ___ Optional

If required, do the students' parents have an opportunity to participate in this counseling? ___ Yes ___ No

13. Can you estimate how many students each counselor at your site serves during a year? _____

(To figure: Student population: _____ Number of counselors: _____)

14. As a rough average, how many minutes per year do you estimate each student spends with a counselor to discuss the selection of course work? ___ 0-20 min. ___ 20-40 min. ___ 40-60 min. ___ 1-1.5 hrs.

Other: Please specify _____

15. Do you feel that you have adequate time to counsel students in a way that results in full preparation for graduation, college entrance, or meaningful employment? ___ Yes ___ No

16. What constraints to implementing the common core curriculum policy have you experienced or observed?

___ Lack of specific articulation
___ Insufficient staff development
___ Insufficient resources/time to counsel and support individual students
___ Lack of convincing data to support the need for such a policy
___ Inability of some students to achieve under heightened expectations
___ Reluctance of some teachers to teach higher level courses
___ Resistance of some students to be channeled into more difficult courses
___ Reluctance of some teachers/counselors to encourage more challenging work for some students
___ Insufficient elementary preparation
___ Lack of efficient way to monitor success/failure
___ Lack of equitable access to core courses
___ Lack of parental interest in and support of policy
___ None
___ Other; please specify. _____

17. In your opinion, to what degree has the common core curriculum policy had a positive impact on:

Factor	High Impact (3)	Moderate Impact (2)	Low Impact (1)	No Impact (0)
Student motivation levels				
Student career choices				
Reducing dropout rates				
Increasing course work success				

APPENDIX D

STUDENT SURVEY INSTRUMENT

STUDENT SURVEY: CORE CURRICULUM STUDY

Students: Please check ( ) the answer that best reflects your opinion about the following questions:

1. When you sign up for classes each semester in core courses (English, math, science, and social studies/history), who usually decides in which particular courses you'll enroll?

   ___ The school decides ___ I decide ___ My parents and I decide

   ___ The school counselor and I decide ___ My parents, the school counselor, and I decide

2. How much assistance and advice do your parents/guardian usually provide when you select your core courses?

   ___ A lot ___ Some ___ Just a little ___ None

3. How much assistance and advice does your counselor usually provide when you select your core courses?

   ___ A lot ___ Some ___ Just a little ___ None

4. When you moved from elementary school to junior high or middle school, did you see the school counselor about your course work? ___ Yes ___ No ___ Not sure

5. Do you see the school counselor at least once every year to discuss your course work? ___ Yes ___ No ___ Not sure

6. Do you think that your course work reflects high expectations of you? ___ Yes ___ No ___ Not sure

7. Do you think that your course work is preparing you to meet all graduation requirements? ___ Yes ___ No ___ Not sure

8. If you are likely to look for a job after graduation from high school, do you think that your course work is preparing you for meaningful employment?

   ___ Not applicable ___ Yes ___ No ___ Not sure

9. If you are likely to go to college after graduation from high school, do you think that your course work is preparing you for college entrance?

   ___ Not applicable ___ Yes ___ No ___ Not sure

10. Do you feel that you have had as much access as other students to classes of your choice? ___ Yes ___ No ___ Not sure

Please continue on the back side.

11. Are you familiar with the district's core curriculum policy? ___ Yes ___ No ___ Not sure

    If yes, do you think that parents should be involved in the core curriculum policy at your school? ___ Yes ___ No ___ Not sure

12. Do you think that you are receiving enough support from teachers in your English, math, science, and social studies/history courses? ___ Yes ___ No ___ Not sure

13. If you have ever used any of the following services to help with your course work, please check the column that best reflects how much it helped you. (You may add other services that are not listed):

Service	Helped a lot	Helped somewhat	Not helpful
Advancement Via Individual Determination (AVID)			
Basic Education Skills Tutorial (BEST) Program			
Chapter 1: Math and Reading Labs			
Chapter 1: Family Reading			
Chapter 1: Family Math			
Chapter 2: Basic Skills Tutorial Program			
Off-track mathematics courses			
Newcomer Program (LEP)			
Advisory Period for At-Risk Students			
EXCEL (extra period for study)			
African American Male Advocacy Program			
Black Leadership Council			
Project CLIMB			
Project System to Encourage Potential (STEP)			
Maintenance and Motivation Program (dropout prevention)			
Mathematics, Engineering, Science Achievement (MESA)			
Opportunity Program			
San Diego Urban Collaborative			
Student Opportunity and Access Program (SOAP)			
Social Concerns (drug/sex education program)			
SAPID (nursery and educational program for young mothers)			
SD Adolescent Pregnancy and Parenting Program (SANDAPP)			
Student Training and Rehabilitation (STAR)			
Student Leadership Groups (training by R/HR facilitators)			
Preparation to Reach College through Excellence and Perseverance (PREP)			
Community role models for students			
Alternative Discipline (In-school/after-school suspension)			
Educational Talent Search (Ch. 1 and low-income students)			
High School Diploma Program (HSDP)			
Career Awareness Program (CAP)			
Academic APT Program (associated with UCSD)			
After-School Math Enrichment (NSF)			

Please go on to next page.

14. Have you ever considered not completing high school <u>because you were dissatisfied with your classes/courses</u>?

___ Yes ___ No

<u>If yes</u>, why? *(Please check all that apply:)*

___ My school work was too easy.
___ My school work was too hard.
___ My school work took too much time.
___ My classes were boring/uninteresting.
___ My classes wouldn't help me get a job after graduation.
___ I didn't like a lot of the other kids at my school.
___ I didn't get along with a lot of my teachers.
___ My friends weren't in my classess.

15. In your opinion, have you been required to take any courses that you considered <u>unnecessary</u> because they were <u>lower level or remedial</u>?

___ Yes ___ No ___ Not sure

<u>If yes</u>, in what subject areas were these courses?

___ Language arts
___ Science
___ Mathematics
___ History
___ Social Studies
___ _____

16. Have you been required to take any courses that have been too difficult for you?

___ Yes ___ No ___ Not sure

<u>If yes</u>, in what subject areas were these courses?

___ Language arts
___ Science
___ Mathematics
___ History
___ Social Studies
___ _____

17. <u>I am in</u>:

___ Grade 7
___ Grade 8
___ Grade 9
___ Grade 10
___ Grade 11
___ Grade 12

17. <u>I am</u>:

___ female
___ male

18. <u>I am</u>:

(Please check all that apply)

___ African American
___ Asian Indian American
___ Cambodian American
___ Chinese American
___ Filipino American
___ Guamanian American
___ Hawaiian American
___ Hispanic American
___ Hmong American
___ Japanese American
___ Korean American
___ Laotian American
___ Native American/Alaskan
___ Pacific Islander American
___ Portuguese American
___ Samoan American
___ Vietnamese American
___ White American

Thank you so much for providing information for the Core Curriculum Study!

Your completed survey, along with the one your parent(s) completed, should be returned in the envelope provided.

APPENDIX E

PARENT SURVEY INSTRUMENT

PARENT SURVEY: CORE CURRICULUM STUDY

Parents: Please check ( ) the answer that best reflects your opinion about the following questions:

1. How comfortable do you feel in advising your student about her/his choice of classes/course schedule? ___ Very comfortable ___ Somewhat comfortable ___ Not at all comfortable

2. Do you regularly assist your student when s/he is choosing her/his courses? ___ Yes ___ No ___ Not sure

3. When your student moved from elementary school to junior high or middle school, did s/he see the school counselor about her/his course selection? ___ Yes ___ No ___ Not sure

   If yes, did you go with your student to talk with the counselor? ___ Yes ___ No ___ Not sure

4. Does your student see the school counselor at least once every year to discuss her/his course work? ___ Yes ___ No ___ Not sure

   If yes, do you usually go with your student to talk with the counselor? ___ Yes ___ No ___ Not sure

5. Do you think that your student's course schedules have usually reflected high expectations of her/him? ___ Yes ___ No ___ Not sure

6. Do you think that your student's course schedules are preparing her/him to meet all graduation requirements? ___ Yes ___ No ___ Not sure

7. If your student is likely to look for a job after graduation from high school, do you think that your student's course work is preparing her/him for meaningful employment?

   ___ Not applicable ___ Yes ___ No ___ Not sure

   If your student is likely to go to college after graduation from high school, do you think that your student's course work is preparing her/him for college entrance?

   ___ Not applicable ___ Yes ___ No ___ Not sure

Please continue on the back side.

8. In your opinion, has your student been required to take any courses that you considered unnecessary because they were lower level or remedial? ___ Yes ___ No ___ Not sure

If yes, in what subject areas were these courses?

___ Language arts ___ Mathematics ___ Social Studies
___ Science ___ History ___ _____

9. In your opinion, has your student been required to take any courses that have been too difficult for her/him? ___ Yes ___ No ___ Not sure

If yes, in what subject areas were these courses?

___ Language arts ___ Mathematics ___ Social Studies
___ Science ___ History ___ _____

10. Are you familiar with the district's "core curriculum" policy? ___ Yes ___ No

11. Did you participate in the development of the "core curriculum" at your student's site? ___ Yes ___ No

12. Have you been involved in assessing or modifying the "core curriculum"? ___ Yes ___ No

13. Would you like to know more about the district's "core curriculum"? ___ Yes ___ No

14. My student is in:

___ Grade 7 ___ Grade 10
___ Grade 8 ___ Grade 11
___ Grade 9 ___ Grade 12

15. My student is:

(Please check all that apply)

___ African American ___ Hawaiian American ___ Native American/Alaskan
___ Asian Indian American ___ Hispanic American ___ Pacific Islander American
___ Cambodian American ___ Hmong American ___ Portuguese American
___ Chinese American ___ Japanese American ___ Samoan American
___ Filipino American ___ Korean American ___ Vietnamese American
___ Guamanian American ___ Laotian American ___ White American

Thank you so much for providing information for the Core Curriculum Study!

Your completed survey, along with the one your student completed, should be returned in the envelope provided BY FEBRUARY 24, 1995.

APPENDIX F

TEACHER SURVEY INSTRUMENT

TEACHER SURVEY: IMPLEMENTATION OF THE CORE CURRICULUM POLICY

Grade Level: _____ School Level: ___ Jr/Mdl ___ Sr ___ Atyp

1. Most sites offer a number of student services that support student success in core curriculum courses (i.e., English, math, science, and social studies/history). In your opinion, to what degree have these services generally impacted the following student outcomes?

Factor	High Positive Impact	Moderate Positive Impact	Low Positive Impact	No Impact
Academic Achievement				
Attendance				
Behavior and Attitude				

2. Have successful programs/strategies that promote student achievement in core courses been identified at your site? ___ Yes ___ No ___ Not sure

   If yes, have these programs been shared with you? ___ Yes ___ No

   If yes, what programs are these? _____

3. How is the attendance of students receiving these services monitored?

   ___ Student sign-up sheet ___ Class records/Roll call ___ Teacher/Counselor follow-up

   ___ Other: Please specify _____ ___ Not sure

4. How does your site monitor the academic progress of the students receiving these services?

   ___ No formal monitoring system ___ Teacher conferences ___ Not sure

   ___ Skills tests ___ Counselor conferences

   Other; please specify: _____

5. When teaching core courses, which of the following responses describes your practices?

   ___ I use district guidelines for my class syllabi.

   ___ I prepare individualized core class syllabi, cognizant of district guidelines.

6. What kind of "bridging" srategies do you use in your classroom to help less prepared students?

___ Cooperative grouping
___ Direct coaching/modeling
___ Peer tutoring
___ Small group discussion
___ Use of relevant experience
___ Additional clarification and summarizing
___ Regular review of difficult concepts
___ Accelerated recognition/reward system
___ Heightened use of discipline to promote focused work
___ Other: please specify _____

7. At the time of articulation from elementary to secondary school, how important do you think the following factors are when a student's course work is decided?

Factor	Very Important	Moderately Important	Very Little Importance	Not Important	Not Applicable
Grade					
Test Scores					
Special Needs (SecondLanguage, Chapter 1, Specia Ed, GATE)					
Attendance					
Teacher Input					
Parental Input					
Counselor Input					
Student Preference					
Behavior and Attitude					

8. Has your site provided any staff development activities related to the implementation of the core curriculum during the past year? ___ Yes ___ No ___ Not sure

If no, has your site provided any staff development activities related to the core curriculum policy since its implementation in 1989? ___ Yes ___ No ___ Not sure

9. Has your site developed a procedure whereby the core curriculum is regularly reviewed to evaluate the status or success of its implementation? ___ Yes ___ No ___ Not sure

If yes, how often does your site's committee meet to discuss the common core curriculum?

___ Annually ___ One review since policy was adopted ___ Two reviews since policy adopted
___ Other; please specify _____ ___ Not sure

What staff/community members regularly participate in this process? (Check all that apply.)

___ Principal ___ Teachers ___ Support staff ___ Parents ___ _____

10. How is the district's common core curriculum policy communicated to parents at your site (i.e., the effort to ensure access by all students to a core program that meets the requirements for high school graduation, college entrance, and meaningful employment)?

___ No formal communication process ___ Part of course sign-up package ___ Newsletter/flyer

___ Parent/teacher conference Other; please specify: _____

___ Not sure

11. In your opinion, do any unnecessary prerequisites or lower level/remedial courses, associated with the common core curriculum, still exist at your site? ___ Yes ___ No

If yes, please specify what subject area and course title:

___ Language Arts _____ ___ Mathematics _____
___ Science _____ ___ Social Studies _____
___ History _____ ___ _____ _____

12. Do you feel that counselors at your site have adequate time to counsel students in a way that results in full preparation for graduation, college entrance, or meaningful employment? ___ Yes ___ No

13. What constraints to implementing the common core curriculum policy have you experienced or observed?

___ Inadequate articulation process between elementary and jr/middle school
___ Inadequate articulation process between jr/middle and senior high school
___ Inadequate articulation process between other grade levels
___ Insufficient staff development
___ Insufficient resources/time to counsel and support individual students
___ Reluctance of some teachers to teach higher level courses
___ Reluctance of some teachers/counselors to encourage more challenging work for some students
___ Uniformed parents
___ Disiniterested parents
___ Staff resistance to learning alternative teaching strategies
___ Resistance of some students to be channeled into more difficult courses
___ Inability of some students to achieve under heightened expectations
___ Insufficient elementary preparation
___ Lack of efficient way to monitor success/failure
___ Lack of equitable access to core courses
___ Lack of convincing data to support the need for such a policy
___ Lack of parental interest in and support of policy
___ Core curriculum fails to meet needs of some students
___ Reduced staff development, given cut-backs
___ Philosophical opposition of staff to core policy
___ Lack of staff familiarity with core curriculum policy
___ Dire socio-economic environment of many students
___ Other; please specify _____
_____
_____

You're almost finished! Please go to last page.

14. In your opinion, to what degree has the core curriculum policy had a positive impact on:

	Check one:			
	High Impact	Moderate Impact	Low Impact	No Impact
Student motivation levels				
Student career choices				
Reducing dropout rates				
Increasing course work success				
Closing the achievement gap				

15. During the past two years, have you participated in any of the following activities? (Please add other activities if relevant.)

Activity	Yes	No	Not Applicable
Summer Enrichment Programs			
Parent Involvement Activities			
Subject Matter Projects (SDAWP, CLP, Math, Soc Stu, Science)			
CLAS Training			
New Standards Project			
LLIFE (Grades 4-8)			

16. Do you ensure that your students are placed in the curriculum at a point that is developmentally appropriate?

___ Always ___ Usually ___ Sometimes ___ Seldom

17. Where necessary to sustain mastery and success, do you provide individualized instruction in a non-graded, multi-level environment?

___ Always ___ Usually ___ Sometimes ___ Seldom

18. Has your site documented observable student behaviors, as provided in the developmental continuum for language arts? ___ Yes ___ No ___ Not sure

If no, does your site have plans to develop or adopt a method of documentation? ___ Yes ___ No ___ Not sure

19. Which of the following subject areas comprise the core curriculum at your site?

___ English language arts ___ Health ___ Science
___ ELEPS ___ Math ___ Social Studies
___ Fine Arts ___ Physical Education ___ Spanish language arts
___ Other; please specify _____

Thank you so much for providing information for the Core Curriculum Study!

Please return via school mail in the envelope provided BY FEBRUARY 24.